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Safety Goes To School

- Drivers' Ed: Both Sides Square Off
- Is Crash Testing Worth the Effort?

VISION '90s Advance Program, p. 25

Publisher: Kevin H. Axe (312) 527-4800, ext. 7101

Editorial Director: Maureen Glass (312) 527-4800, ext. 7103

Coordinator: Richard Frisbie

Managing Editor: Austin Weber (312) 527-4800, ext. 7108

Associate Editor: James W. Lahey

Art Director: Anne F. Malone

Cover: Constructs Studio, art; Terry Vitacco, photo

Director, Publications Marketing: Kevin Shanley, (312) 527-4800, ext. 7401

Advertising/Circulation Manager: Joel Wakitsch (312) 527-4800, ext. 7404

Advertising Sales:

East
Clint Pross (312) 527-4800, ext. 7408

Midwest
(312) 527-4800

National
Diane Borker (312) 527-4800, ext. 7402

Advisors:

Noel Bufe, Ph.D., *director, Traffic Institute, Northwestern University, Evanston, Ill.*; *vice president for traffic*, Walter D. Weiss, *group director of safety, Leaseway Transportation Corp., Birmingham, Mich.*; *vice president for motor transportation*, Neil Boot, *director, driver improvement programs*; Ted E. Dudzik, *traffic law enforcement and police records specialist*; Jan Hazlett, *school transportation safety specialist*; Tim Kennedy, *occupant restraint specialist*; Al Lauersdorf, *alcohol programs administrator*; John McCarthy, *manager, program development and training, driver improvement programs*; Harold Thompson, *manager, highway traffic safety services*; Lester B. Sokolowski, *director, motor transportation*; James Solomon, *administrator of training, driver improvement programs*; Richard L. Tippie, *director, transportation safety*.

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September/October 1990

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TRAFFIC SAFETY

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Plastic Bridges?

According to the Federal Highway Administration, nearly 40 percent of the nation's 570,000 bridges need to be replaced or repaired due to structural or functional deficiencies.

Enter Dr. Abdul-Hamid Zureick of the Georgia Institute of Technology, 1989 co-winner of the Norman Medal, awarded by the American Society of Civil Engineers. In their search for "innovative and cost-effective rehabilitation techniques," Zureick and his students, under the sponsorship of the National Science Foundation, are testing Extren fiberglass I-shaped sections donated by Morrison Molded Fiber Glass Company, Bristol, Va. Using Georgia Tech's hydraulic pressing instrument, which is capable of applying 450,000 pounds, Zureick is studying the behavior of fiber-reinforced plastic structural components under various loading conditions and as protection for communications systems.

According to Zureick, plastic reinforced with glass fibers is nonconductive and "invisible" to electromagnetic signals, which would make it especially useful in shields called "radomes," which protect communications systems (antennae, military radar instruments, broadcasting towers, and weather-tracking devices) from harsh weather conditions, helping to prevent corrosion and damage without causing signal interference. Because its weight is approximately one-fourth that of steel, fiber-reinforced plastic may also be the cost-effective solution in the rehabilitation of deteriorating steel bridges.

But before this conclusion can be drawn with certainty, the research begun by Dr. Zureick last September will continue. Although results thus far are "promising," Dr. Zureick reports the need for additional testing to assist design engineers and contractors in their understanding of the static and dynamic behaviors of fiber-reinforced plastics to determine appropriate applications in response to various design challenges. For example, some plastics bend or deflect more easily than steel under certain loading conditions so that optimum shapes must be determined to minimize this feature while maximizing the strength and low-weight features.

Public Wants Safety Belt Enforcement

According to a recent public-opinion survey of 1,208 randomly selected licensed drivers older than 18 conducted by Macro Market Research, Burlington, Vt., for Traffic Safety Now, Inc., Americans favor safety belt laws 3:1 for the fifth consecutive year.

In addition, most would like to see stricter enforcement of safety belt laws by police officers. Less than 20 percent of those surveyed in states that have safety belt laws believe local police departments consider issuing safety belt citations a "high priority." Currently, 34 states and the District of Columbia have safety belt laws.

In a separate survey of law-enforcement officers, 55 percent indicated that their departments place a "high priority" on safety belt citations and 72 percent said they routinely enforce these laws.

Traffic Safety Now, Inc., is a nonprofit organization dedicated to reducing national traffic injuries and fatalities by encouraging safety belt use and educating the public about occupant-restraint systems, including air bags. Its president, Charles L. Spilman, believes this survey shows that traffic safety issues are a priority for most Americans. Since 1984, when the first state law was passed, safety belt use has increased from 14 percent to 47 percent, according to the National Highway Traffic Safety Administration. Spilman believes this to be an indication that police officers are enforcing the laws. "However, we believe increased enforcement can help us meet President Bush's goal of 70 percent belt use by 1992," he added.

The National Highway Traffic Safety Administration estimates that more than 10,500 lives have been saved as a direct result of safety belt laws since 1984.

For more information, contact Charles L. Spilman at (313) 872-0796 or Ray Carson of Casey Communications Management, Inc., (313) 423-4600.

Council Expands Syracuse Office

The National Safety Council recently expanded of its Syracuse, N. Y., Driver Improvement Programs office into a full-scale regional office serving 13 Northeastern states and the District of Columbia.

The new Northeastern Region Office (NRO) will offer a broad range of Council services, in addition to its current DDC programs. It will be the regional center for:

- Membership registration.
- Council materials and programs.
- Safety Training Institute programs.

The office will be open weekdays, from 8:30 a.m. until 4:45 p.m. (Eastern Standard Time). For further information call 1-800-432-5251.

Trend Toward Truck Safety

Fatal truck accidents declined during the 1980s, according to a new government study.

Fatal accidents involving medium and heavy trucks declined markedly from 1981 to 1982 after peaking in 1979, according to the General Accounting Office (GAO). The reason for this sharp decline is not known. After a subsequent constant plateau in truck fatalities, the GAO reports that another decline in truck fatalities occurred in 1985.

In their traffic safety report for the House Public Works and Transportation Committee, the GAO also reported a steadily declining fatality rate for all vehicles and drivers, indicating that an apparent increase in traffic deaths since 1983 "is most likely a function of increased motor vehicle activity rather than a decline in general safety."

The report also indicated that although they have a low occupant fatality rate, medium and heavy trucks have high accident involvement rates. (In determining accident rates, total miles driven and number of registered vehicles are considered to avoid rates simply reflecting a change in the number of vehicles on the road or increased "exposure.")

The number of truck occupant fatalities peaked in 1978 and then declined, with 40 percent fewer fatalities in 1987 compared with 1978. The 1987 low point is almost 20 percent less than the rate for 1975, the year the number of deaths began to increase. The GAO study, which is based on information acquired through the Department of Transportation's Fatal Accident Reporting System, thus cites a trend toward improvement in truck safety.

New Study Throws Curves

A maximum 80 percent reduction in traffic accidents can be achieved through the alteration of highway curves and adjacent roadsides, according to a University of North Carolina at Chapel Hill (UNC) study sponsored by and submitted to the Federal Highway Administration, which will share the report with highway departments throughout the nation.

Researchers at UNC report that traffic accidents are two to four times more likely to occur on one of the nation's estimated 10 million two-lane highway curves than on straight sections of the road and that these accidents are generally more serious. According to Charles V. Zegeer, program manager at UNC's Highway Safety Research Center and principal investigator for the study, "the sharper the curve, the greater the number of accidents."

Although previous studies have reported these same findings, the UNC study is the first to assess the cost-effectiveness of various road improvements alone and in combination.

Researchers combined national and state computerized files related to accidents and traffic and road characteristics to analyze relationships between these variables in traffic accidents. They found that flattening curves, adding more slope or banking, removing or relocating roadside obstacles, adding transition curves before and after main curves, and widening roads and flattening embankments can prevent property damage and save lives.

SHORTCUTS

Drug-Free Truck Drivers

Strict recommendations to curb the use of drugs and alcohol by the nation's truck drivers, improve carrier scheduling to reduce driver fatigue, make truck cabs more "crashworthy" and encourage drivers to wear safety belts are being proposed by the National Transportation Safety Board (NTSB).

A NTSB study found that one-third of the 185 fatal crashes involving trucks from 1987 to 1988 were caused by driver fatigue, and one-third of the drivers had drugs or alcohol in their systems. Alcohol and marijuana were the most commonly used drugs.

Ten percent of the fatalities were caused by medical problems, the majority from heart attacks. Only one of the drivers killed was wearing a safety belt.

Although the safety board believes that these numbers are decreasing due to federal drug testing regulations, it is considering stricter safety standards for the trucking industry including:

- Improved pre-employment background checks and screening for alcohol and drugs;
- Better training in drug recognition for supervisors;
- Testing drivers for drugs and alcohol at weigh stations and roadside inspection stops;
- Enforcement of a 0.00 percent blood alcohol level, called the "zero-zero" standard;
- National standards for post-accident toxicological reporting;
- State laws requiring testing of all drivers involved in fatal crashes, including automobile drivers;
- Requiring on-board recording devices to detect hours-of-service violations.

The 1989 Motor Carrier Safety Survey sponsored by the Regular Common Carrier Conference found that "the average truck driver believes that about one in four of his or her fellow drivers regularly drives under the influence of illegal drugs," according to Dr. Richard Beilock, associate professor of food and resource economics at the University of Florida. This was a decrease of only three percent from 1988.

Both owner-operators and drivers support drug-testing to stem this alarming practice. Eighty-four percent of the nation's truck drivers approved pre-employment testing; 90 percent favored post-accident testing; 89 percent backed testing with regular Department of Transportation-mandated physical exams; 76 percent approved "reasonable suspicion" tests; 68 percent supported random tests.

In 1989, the typical truck driver reported using a safety belt two-thirds of the time, up 17 percent from the year before; one in two reported using one all the time.

TWO-WAY STREET

Simplistic Solution?

As an organization and profession, Driver Education has not taken an official position on the use of a driver's license to force a youngster to stay in school. However, the general consensus from discussions of leadership groups within the organization is that we are generally not supportive of the idea.

We don't think the punishment fits the crime.

We tend to agree with Gary J. Bloomfield, Ph.D., traffic safety educator with the office of the superintendent of public instruction for the state of Washington, who said in the April 1990, issue of the *Journal of Traffic Safety Education* that "on the surface this appears to be a very simple solution to a very complex problem."

Dr. Bloomfield emphasized what many have said and many others thought: "There is no rational connection between being a student and being a good safe driver." He further stated: "The connection between attending school and driving ability is so unreasonable that I ask what will be tied next to obtaining the driver's license?"

Jefferson D. Keith
Executive Director
American Driver and Traffic Safety Education Association
Salisbury, Md.

Attack the Source

In 25 years as a safety director, I have found that the only way to solve a problem is to attack the source. I strongly encourage the National Safety Council to use its publications and the annual Congress, and its influence in our government, to discourage the use, not simply the abuse, of alcohol.

- Make the taxes on beer and wine the same level as those on hard liquor and index them to the inflation rate.
- Eliminate alcohol advertising and promotion of public events where the majority of the audience is underage.
- Ban advertising that promotes alcohol use.
- Forbid the industry to sponsor athletic events.
- Prohibit promotion of alcohol by celebrities who have a strong appeal to young people.
- Place warning labels on alcohol ads as well as liquor containers.

Max Greer
Safety Director
Reeves Bros. Inc.
Spartanburg, S.C.

Any Comments?

"Two-Way Street" is *your* forum; a place for ideas and opinions on issues important to traffic safety professionals as well as comments about articles in previous issues of TRAFFIC SAFETY.

Please address letters to "Two-Way Street," TRAFFIC SAFETY Magazine, 444 N. Michigan Ave., Chicago, IL 60611.

Letters may be edited for clarity or because of space.

More on Safety Belts

Regarding your survey on auto equipment, I know of at least five instances where safety belts prevented serious injury, and one instance where they were not worn but would have helped.

Virgil Graf
Safety Advisor
Pacific Bell
Pasadena, Calif.

Driving Attitudes

In response to our survey on public attitudes, response was mixed on whether the public is becoming less tolerant of drinking and driving. In some places it may be less socially acceptable than others.

No respondent saw any signs that "police are more likely now to consider their own driving behavior as an example to the public."

One reader, who asked that his name not be published, complained that his whole state (in the South) is deficient in traffic safety enforcement and noted that the condition of many cars and trucks owned by the state and local governments, including squad cars, "certainly does not set the proper example."

(Because he didn't want his name used, we thought it was fair to let his state remain anonymous as well, without overlooking the point he raised.)

SURVEY

Should Kids Drive at 16?

THIS PAGE is designed to make it easy for you to express your opinion as a traffic-safety professional on the pros and cons of high school driver education.

You can just tear out this page and send it in. Or if you have to share your copy of TRAFFIC SAFETY with others, you may want to photocopy the page. Then, if we haven't provided enough space, you can write additional comments on the back.

We'll publish what we find out in a future issue.

Mail your responses to:

TRAFFIC SAFETY Survey
Managing Editor
National Safety Council
444 N. Michigan Ave.
Chicago, IL 60611

	Agree	Disagree	Undecided
1. Driver education should continue to be taught in high school.			
2. The driving age should be raised from 16 to 18.			
3. Licenses should continue to be issued at 16, but with restrictions.			
High school driver education *in your community* seems threatened by lack of official support.			
Comments:			

Safety Goes To School

Florida coaches kids to walk and bike to stay alive

BY DAN BURDEN

IN THE FALL of 1984, Rebecca Mintz, age nine, was riding her bike to school in Miami. Concentrating on her friends in front of her, Rebecca ran a stop sign and was hit by a motorist. Rebecca died. In their grieving, her parents, Lynn and Sandy Mintz, vowed that such predictable and repetitive trauma should end. They contacted local and state officials for ideas. Then, using the talents of a friend familiar with public relations, they launched an effort to get traffic-safety education into all Miami/Dade County schools. They weren't interested in just another campaign. They wanted an ongoing, comprehensive traffic-safety education program offering skills and competency to all children in all schools.

Although traffic-safety specialists have known for years that children in America face a greater likelihood of death or disability through traffic-related injuries than through any other disease or cause, the volume and lifelong extent of these injuries appears to be overlooked. Statistics reveal that traffic trauma takes 20 times more children's lives than drugs and kidnapping combined. This is a surprise to most parents, and even many law enforcement officers. Many others still are unaware that today more children lose their lives in traffic outside of the automobile (walking and bicycling) than inside as a passenger. And, although six times as many children are killed walking as bicycling, the majority of injuries occur to bicyclists.

Local Origins

When the Mintzes began their campaign, they found know-how waiting at the Florida Department of Transportation's bicycle/pedestrian program office. Within weeks a program was underway. This program was aimed at making all children predictable and competent to deal with traffic for life. The program focused on the beginning years. Students would learn actual skills leading toward early competency in traffic. These skills would include school bus and passenger safety and bicycling and walking.

Five years later, with the ongoing help of the Dade County Citizens Safety Council, more than 100 of the 225 schools now offer 12 lessons per year in traffic-safety education. The program has been expanding by about 25 new schools each year. Although the program began as a fourth-grade curriculum, in 1990 an expanded curriculum is being offered in grades three, four and five. By 1993, most Dade County schools are expected to offer the program in all schools and in all grades, K-8.

P.E. Teachers Important

The key to the success of this program is the harnessing of the time and talent of grade school physical education teachers and teachers aids. Each teacher goes through two full days of training by their peers and a state specialist. Teachers then combine classroom with on-bike, and finally, for most, on-road training. Lesson topics expand on the earlier success of

Parents are right to insist on bicycle helmets. More children are killed biking or walking than riding in cars. (Photos by Dan Burden.)

programs such as Willy Whistle and other established school bus or passenger safety curricula.

Statewide interest in this program eventually brought more dollars through state use of National Highway Traffic Safety Administration monies, and through additional funds from the governor's energy office. More than $350,000 in funds are going into the program this year, with an equal amount planned for the next two years. But even that is not enough. A special request has been readied for the Florida legislature asking for $1 million per year during a three-year expansion of the program. The goal is to have as many as 80 percent of Florida's schools offering the program by mid-decade.

Nearly 400 Schools in Program

As of spring 1990, nearly 400 schools were offering the program in eight of the largest of Florida's 67 counties. Polk County already has the program in all 60 of its schools and has a full-time grade school traffic-safety education program coordinator. One other full-time coordinator is planned for Dade County. To help with the expansion of the program, this year the state offered six two-day training courses, reaching 400 new instructors.

Based on the early success of the program, the optimistic goal of including 80 percent of the grade school population may be reached. Expanded funding is needed to make sure. A case for traffic-safety education must be built. The real costs for such a program are made clear by comparison with other education efforts. The average school child receives about $45,000 for K-12 public schooling. For the 60 to 65 percent fortunate to take drivers-ed, about $200 of this $45,000 goes toward teaching this topic. But today, in most states, from birth through age 15, children receive an average of $1 for learning traffic-safety. Virtually all of this comes from outside the schools, usually through the time and materials of police. Although the police are effective in getting their message about traffic laws across to most children, it has little bearing on early traffic-safety skills development.

How Children Learn

Unfortunately, children during these developmental years are learning sloppy habits. They're not learning defensive street crossing and the visual and psychomotor skills needed to cope with gap assessment, hazard detection and other fundamental traffic threats. Children need practice, not just rules. They also need to expand and repeat lessons from grade to grade, learning new applications as they develop. Dr. Ken Cross, a traffic-safety research psychologist who assisted with analysis of bicycle and pedestrian accident causation for the National Highway Traffic Safety Administration, reports that early childhood habits are highly resistant to change. Only good traffic habits should be permitted.

"With this kind of a head start in good traffic habits," said Dade County's traffic-safety education program director, Bill Harris, "Dade County's children will have a jump on the even higher traffic risks in their early and later driving years. The exact same searching, gap assessment and hazard detection skills are needed under the later demands of driving."

National Spark

Concepts for this training came first from Bike-ed '77, a federally sponsored conference to identify effective traffic education countermeasures to accidents. It was at this meeting that Dr. Ken Cross, Don LaFond, Richard Blomberg and other researchers addressed the basic causes of childhood traffic accidents and developed models for intervention. Two years later, these concepts were tested in Missoula, Mont., using a pilot fourth-grade curriculum. The program was designed specifically for physical education teachers, a profession that makes use of the energy and attention of children in an often positive outdoor learning atmosphere.

After the pilot year, and following a testing and evaluation period, the program was expanded to most Montana schools by the mid-80s, just when Florida was getting started. A similar start in Hawaii public schools began in 1989. Last spring Vermont launched its own program, using similar principles. The New York state legislature is considering the need to support a comprehensive education program, and Maryland also is looking at it. North Carolina and other states are considering the role of physical education teachers in developmental traffic-safety education.

Lacking any formal evaluation studies, we turned to Montana's highway safety specialist, Al Goke. In checking bicycle traffic accident records, Goke was unable to find a single Montana child covered by this program who has been involved in a medically treated bicycle crash during the seven-year period 1980-87.

The Future

During the fall of 1989, Don LaFond, a Maryland Department of Education curriculum and traffic-safety specialist, led 40 of the nation's best physical education, traffic-safety and curriculum writers through eight days of program analysis, and then drafted lesson plans and teaching objectives for the expanded K-8 program. Although many months of added work are still needed to prepare final printed lessons, sample full-grade lessons are being offered to more than 300 Florida schools for testing of the grades three, four and five this year. The expanded program covers school bus and passenger safety and pedestrian and bicycling skills development. The program does not cover alcohol, since the program looks more at skills than attitudes. For those wishing to use proven alcohol lessons, the curriculum can be adapted.

According to Roger DiBrito, a Missoula, Mont., phys-ed teacher and one

Dan Burden is state bicycle and pedestrian coordinator for the Florida Department of Transportation. As a cyclist, he led a biking expedition to Argentina and founded the Bikecentennial Inc., the Bicycle Federation of America Inc. and Bicycle Forum *magazine.*

He has written two books and contributed many articles and photographs to magazines on cycling and safety issues. He is an advisor to the National Safety Council.

Additional information about the Florida program is available from the Florida Department of Transportation, 605 Suwannee Street, M.S. 19, Tallahassee, FL 32399-0450. Phone: 904/488-4640.

Statistics in this article are adapted from the Safe Kids Are No Accident Campaign, 1986-87 database using records of the National Safety Council, Federal Bureau of Investigation and Library of Congress.

"They weren't interested in just another campaign."

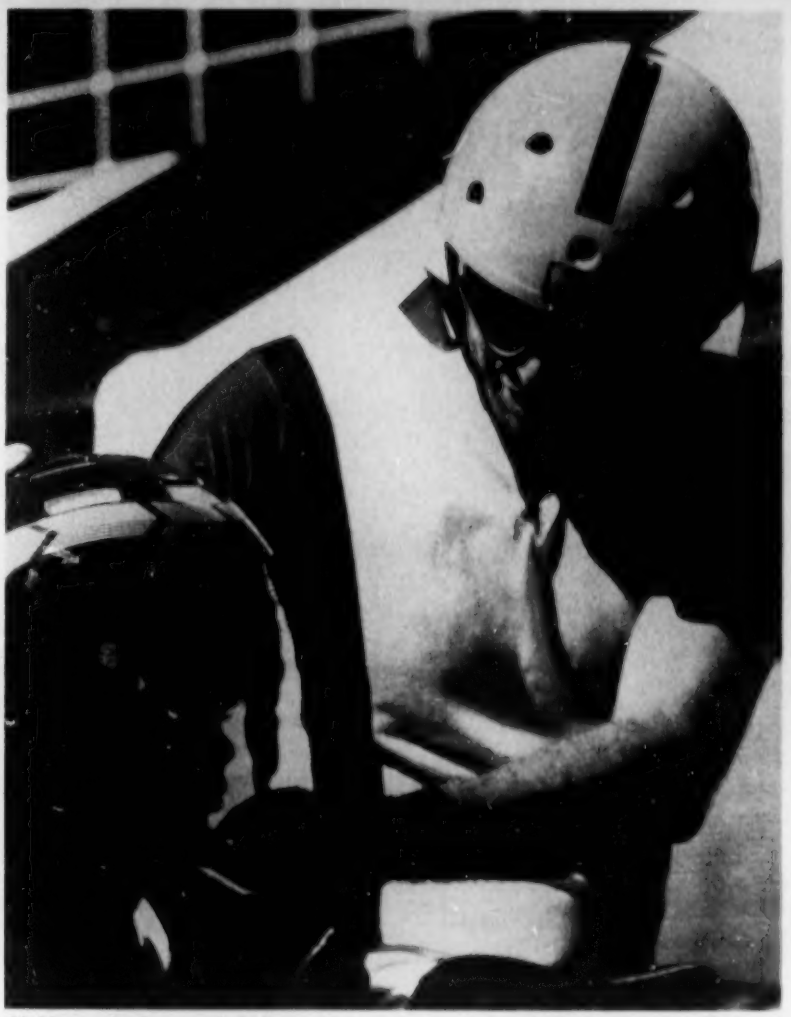
of the original architects of the program, "the curriculum and teaching exclude nothing and no one." Police and other traffic-safety experts will continue and indeed expand their roles, when involved in this program. However, the program is focused on the teachers who know and work with children in their overall motor skill development.

"Missing Ingredient"

"We have found the missing ingredient for ongoing traffic-safety development," reports DiBrito, who is the president of Montana's Alliance for Physical Education Teachers.

DiBrito also has a vision that one day many, if not most, public schools will employ full-time physical education teachers in the grade schools who will actively teach the entire K-8 curriculum. According to DiBrito, "Many communities still view physical education as a luxury. When these professionals take on the added role of teaching kids to be safe in the most at-risk activity of their lives, the profession will be more secure and entrenched."

Average spent on traffic safety: $1 per pupil.



Children who learn safe habits will be safer on the road all the rest of their lives. New program tries to teach them early.

These Florida, Montana and Hawaii programs, however, must each fight an uphill battle. Every dollar for curriculum writing, video lessons and other essential developmental steps is being granted slowly. Virtually all schools that have launched the program have held onto the training despite hardships. "This program becomes the most popular physical education topic for kids, parents, principals and phys-ed teachers in virtually all schools," reports full-time traffic-ed specialist Rod Jamison of Polk County, Fla. Jamison, formerly a West Virginia drivers-ed teacher, now travels around Florida, coaching, convincing and committing new school districts to follow Polk County's lead. Jamison's salesmanship is persuasive. He and his fellow physical education staffers are hard to turn down. They know the program works, and they sell the concepts with enthusiasm. Six other Florida school districts are waiting to join the first eight counties. With new funding for needed training, bikes, helmets and other essentials, these counties will join the program.

Resistance at First

But each school must be convinced slowly. There is a lot of resistance at first. "We start with the peers in the phys-ed staff. When they become convinced, and when they work out the little bugs, such as solving class scheduling and teacher loads, or addressing the issue of head lice in helmets, then others follow," reports Marvin Hertz, one of Dade County's six-year veteran administrators of the program. Dade had three schools drop the program in its six-year history. These schools simply could not find a place to store the bicycles. "When we find an affordable solution, all three will be back, full speed ahead," reports Hertz. He retired earlier this year after 30 years in physical education. He now works as a consultant to assist the statewide expansion of this program.

How can other communities or states begin? He suggests that a key administrator attend one of Florida's training courses, study the curriculum and see how the actual lessons are taught. Once the concepts are understood, sharp administrators will know how to apply the principles in their own settings. School districts with 10 to 20 schools can be 100 percent operational within two years. Larger districts like Polk County, Fla., with 60 schools, can also be fully operational within two years. "All it takes is commitment," reports Bob Mariotti, the administrator who made it work in Polk County.

Brian O'Neill is president of the Insurance Institute for Highway Safety and the associated Highway Loss Data Institute. He is the author of numerous scientific papers and co-author of The Injury Fact Book.

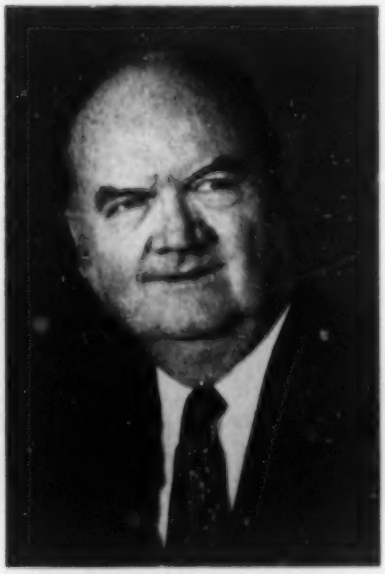
ANTI- High School Driver Education

It causes crashes by putting 16-year-olds on the road

BY BRIAN O'NEILL

WITH TIGHTER and tighter public school budgets, high school driver education is coming under closer and closer scrutiny. The basic question is, should it be part of the public school curriculum? Many parents and most driver-ed instructors would say yes. On the other hand, many highway safety experts would say no. The answer depends on what's expected of such courses and what measures are used to assess them.

High school driver education is one way — not the only one, but a popular and perhaps a good way — for teaching basic driving skills. If this were the only measure by which driver ed were judged, it would be noncontroversial. Indeed, it does help teach young people to drive. But a much more ambitious purpose is usually claimed for high school driver education, namely that it's an effective way to reduce teenage involvement in motor vehicle crashes by producing safer drivers. In some instances, such claims become extreme, with advocates of driver education programs



Jefferson D. Keith is executive director of the American Driver and Traffic Safety Education Association in Salisbury, Md.

FOR High School Driver Education

It saves lives by starting youngsters out right

BY JEFFERSON D. KEITH

RIGHT NOW the real question concerning High School Driver Education (HSDE) is not whether it is valuable, or whether it is outdated, or whether the legal driving age should be raised or whether remaining in school should be mandatory for retaining a license. The real question is whether HSDE will even exist in the next five to seven years. If present trends continue, the demise of HSDE is a distinct possibility.

Driver education has little visible support among top-level decision-makers in federal, state or local government. The system faces a critical shortage of certified driver education teachers. Fewer and fewer colleges and universities are offering the course. It has become practically impossible for schools to obtain vehicles for the driver education program. Instead of authorizing modifications to strengthen and improve the driver education program, administrators are directing cutbacks and changes that make continuation on a meaningful basis very difficult.

In the early 1980s the National Highway Traffic Safety Administration (NHTSA) decided driver educa-

suggesting this is the only way to produce safe drivers. And it's here that such advocates get into trouble because, on the basis of improving safety, high school driver education isn't fulfilling its promise.

Results Disappointing

We know a lot about the effectiveness of high school driver education in preventing crashes, and virtually all of what we know is disappointing. Study after study conducted in this country and elsewhere indicates that driver ed has failed to reduce teenage involvement in motor vehicle crashes.

In fact, extensive research shows that trying to reduce crash involvement by drivers of any age — not just teenagers — through training is largely unsuccessful. There's no reason to expect major breakthroughs in this regard in the future, so it's exceedingly unli' ly that we'll ever be able to teach or train drivers so that they have fewer crashes.

Even if driver education programs could be improved in the future to produce safer drivers, we've got to accept that, in the meantime, current programs don't accomplish this. On the contrary, high school driver education is making the problem of teenage crash deaths and injuries worse instead of better. There's convincing evidence that the availability of such programs results in teenagers getting their licenses sooner than they otherwise would. This, in turn, increases the per capita crash rate of teenagers.

Research says training doesn't cut crashes much.

This disturbing consequence of high school driver education has led some people in the field of highway safety to advocate eliminating such programs from schools as a way of delaying licensing and thus reducing the crash death and injury problem. Others, while acknowledging the problem, have argued we shouldn't focus on high school driver education because society has decided, in most states, that 16-year-olds can get licenses, even though it's understood their crash rates will be high.

European Kids Don't Drive

Why don't we have tougher driver training and licensing programs, as many people assume is the case in European countries? What they actually do in most of these countries is prohibit 16-year-olds from driving cars. Then, they make it virtually impossible even for 17-year-olds to get licenses because of training and other obstacles. The result is that they effectively delay licensing, a sure way to reduce teenagers' crashes. The more straightforward way to delay licensing is simply to raise the driving age.

Parents who spend many hours acting as unpaid chauffeurs to their children often believe 16 is a reasonable age to get a license. And teenagers themselves usually want to get licenses as soon as possible. But from a safety standpoint, there's no doubt that 16 is too young for unrestricted driving privileges. The best compromise between safety and mobility is probably to restrict — but not prohibit — driving by teenage beginners. For example, nighttime driving curfew laws have been shown to reduce young people's involvement in crashes during the affected hours.

The choice of where to set the min-

tion was not a national priority. That decision, strongly influenced by an unjustified broadside attack on driver education by the Insurance Institute for Highway Safety and repeatedly supported by the appropriate congressional committee, is now really being felt. As long as NHTSA maintains that ill-advised position, other decision-makers down the line will be taking the same easy way out. As a result, the very desirable goals top-level decision-makers have set for highway traffic safety will be pipe dreams. Without a solid high school driver education program, highway traffic safety problems will continue to mount.

Statistics

Statistics released recently by NHTSA about the effects of alcohol on traffic safety showed that nearly 27 percent of all fatally injured 15- to 19-year-olds were intoxicated. But from 1987 to 1988 the number of intoxicated drivers ages 15 to 19 involved in fatal crashes *decreased* from 2,187 to 1,497, while the total number of 15- to 19-year-olds killed increased from 7,690 to 8,167.

The statistics can be used to em-

The real question is whether high school driver ed will still exist.

phasize the need to focus attention on elements of traffic safety other than drugs, drinking and safety belts. What is the other side?

If only 10 percent (600,000) of all police-reported accidents are alcohol related, that means 90 percent (5,400,000) of police-reported accidents are caused by something other than drinking.

If just under 50 percent of all traffic fatalities are related to alcohol, then more than 50 percent of such fatalities are caused by something else.

If fewer than 38 percent of all fatally injured drivers are intoxicated, then more than 62% are not.

If fewer than 25 percent of all drivers involved in fatal crashes are intoxicated, more than 75 percent are not.

The fact that the number of intoxicated fatalities among 15- to 19-year-olds decreased while the number of fatalities from other causes increased emphasizes that something other than alcohol causes accidents. The braggadocio manner of reporting this fact appears to say, "It's not whether they were killed that's important, but whether they were intoxicated when they died."

Dramatic Improvement

The most dramatic improvement in traffic safety over the last 25 years came about through national emphasis on the total systems approach, coordinating 18 different standards or guidelines. The NHTSA decision referred to earlier also included removing 12 of those guidelines from their program to focus on only six. [That action motivated the deterioration of the total systems approach to improved traffic safety.]

We argue that this reduced emphasis on quality driver education, among other important segments, is the major "something else" contributing so significantly to traffic fatalities. At a time when the need for strengthening and improving high

imum age for licensing, like the choice of whether to eliminate driver education or keep it in our high schools, is essentially political and should be made by adequately informed policymakers. Unfortunately, such choices too often are made under a deluge of claims and counterclaims but without enough hard facts. So here's one hard fact backed up by an abundance of research: While high school driver education may be a good way to teach the vocational skill of driving, it doesn't reduce deaths and injuries from motor vehicle crashes caused by teenagers. Claiming that high school driver education lessens this problem is ignoring reality.

Night curfew for teen drivers good compromise.

school driver and traffic safety education is critical, the matter goes untended, ignored in areas where positive action could produce dramatic results.

When a novice driver acquires a license in any jurisdiction, that person is entitled to drive anywhere, regardless of the quality of the preliminary training. That being the case, why should one state be motivated to maintain quality HSDE when surrounding states ignore such needs saying, "If NHTSA says it isn't a priority, why should we worry about it?" More and more educators are saying, "It's not our job."

An esteemed educator of the past (Horace Mann) said, "Schools exist to teach people to do better that which they will be doing in any event." No statement ever made a better case for high school driver education. When HSDE was riding the crest from the mid-1960s to the mid-1970s it was recognized as a valuable part of education. Why?

What Parents Want

Parents wanted their youngsters to be taught safely and well by prepared professionals. Members of the community recognized it as the proper functioning of their educational system, meeting a defined need, addressing the growing traffic safety problem. It was available to youth at a prime time in their learning process. It tied together what all the other courses taught better than any other means. Built on real-life experience, it became a real slice of life on a first-hand basis. It produced quicker positive return and long-range benefit than anything else taught in school. The fact that these values do exist tends to be supported by the "other side" of the statistics alluded to above.

There are those who say driver education is not doing the job. You cannot make such a claim without first clarifying what driver education really is. Quality driver education is doing its job wherever it is cultivated and permitted to exist and function as it was designed. As the quality of a program declines so does its effectiveness. It is not driver education that should be faulted or condemned. Those who determine the nature of the program — administrators, principals, county council members, legislators and regulators and all who are involved in directing and allocating funds — are the ones who should be called to task.

Youngsters have to learn to drive sooner or later.

Most of those adverse to driver education are powerful and sufficiently endowed to be heard and influence decisions. They lump ALL driver education, from the highest quality program to the poorest, into one category and condemn the entire lot. There are objective, definitive, scientifically conducted studies showing that students who take driver education have better driving records than students who have not taken the course. There is no evidence that driver education doesn't produce positive results.

There is strong support for the view that new drivers should be more carefully supervised and required to operate under more restrictions than currently prevail in most states. I certainly agree with that thinking. I also recognize the desirability and advocate the development of a continuing educational plan for the post-licensing period between 16 and 18. On the other hand, I think it is asinine to consider raising the driving age to 18.

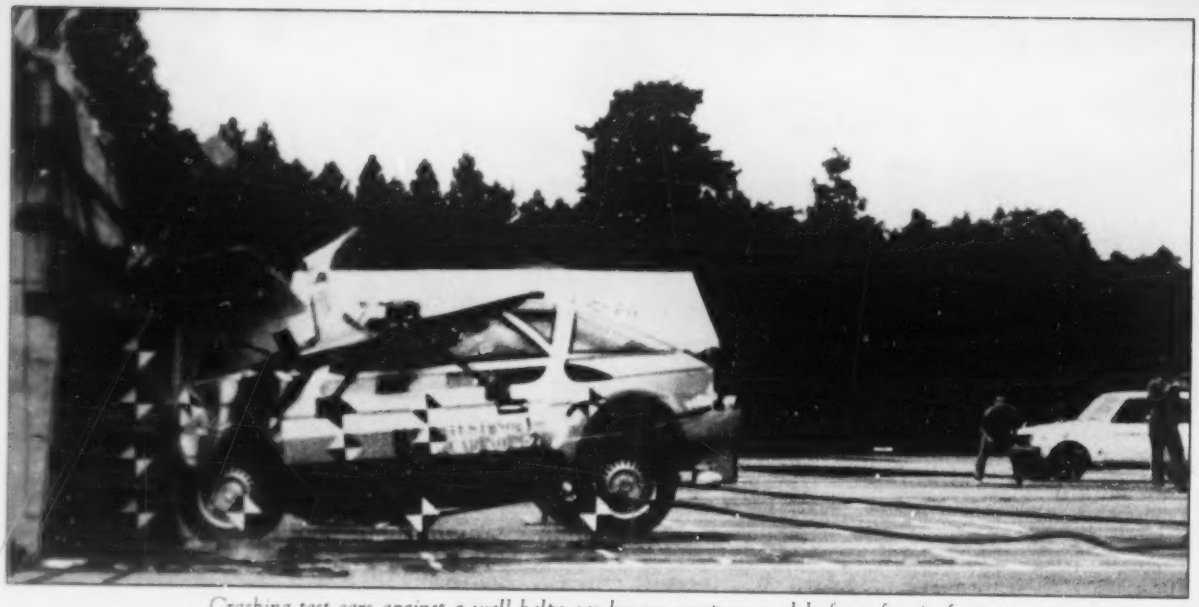
It is obviously true that eliminating licensing prior to 18 will reduce deaths in the 15 to 17 age group. It is equally true that raising the legal driving age to 21 would prevent even more accidents and fatalities. Those who advocate licensing at 18 overlook the fact that the greatest number of fatalities from traffic accidents each year occurs in that particular age group. The "raise to 18" position, held predominantly by people from densely populated areas, also overlooks the tremendous economic hardships it would force upon rural/agricultural states and communities.

The need for quality driver education is greater right now than it has ever been, but less is being done about it. The solution is not in avoiding the issue of improved driver and traffic safety education. The solution is in the more intelligent redirection of funds currently being used on glamorous superficial issues.

Consider a recent statement by a veteran New York City paramedic: "I have witnessed endless carnage on our streets and highways. I believe the most prominent contributing factor to the mess I witness daily is poor driving skills." In his opinion, "The most effective action federal highway officials could take would be to make states require greatly improved driver training as a condition for receiving federal highway money." Discussions with like specialists across the country confirm that thinking.

It is indisputable that not enough has been done to keep driver education updated. That is not the fault of the profession. The desire on the part of the profession to do what has to be done to get back on today's track exists in abundance. The know-how is there and could be implemented in a manner that would rekindle national interest. But the top-level decision-makers who think they know how to eliminate traffic safety problems without addressing the issue of driver education, and NHTSA is at the very top of the heap, find it much easier to dodge and hide.

If present trends prevail, this country will eventually find itself starting over from scratch in driver and traffic safety education. Then it will be much more difficult to exert the necessary effort to turn things around.



Crashing test cars against a wall helps car buyers compare models for safety in frontal collisions. But test results say nothing about side collisions, which kill 8,000 people a year. (NHTSA photo.)

CRASH TESTING UP AGAINST THE WALL

Budgets limit value of results

BY THOMAS FRISBIE

FOR YEARS, efforts to interest American auto buyers in safety features met the same fate as the vehicles used in crash-testing. They hit a brick wall.

Now, however, there is a surge of public interest in safer cars. More buyers want to know which cars are safer, and automobile companies are basing advertising campaigns on safety themes. As a result, there is a call from public-interest groups for more types of crash testing and more complete data from existing tests.

In fact, if a suitable image were sought to replace the old brick wall of public indifference, it might be that same wall equipped with modern air bags.

"There is no question that people are more safety conscious," says Brian O'Neill, president of the Insurance Institute for Highway Safety, a research organization funded by casualty insurers. "Surveys of dealers and all sorts of information show clearly that safety is very high on the consumers' lists when they are thinking of buying a car. Interest in safety has been growing clearly in the past few years."

As consumers have become more safety conscious, so have automakers and the federal government. But that has raised a new question: Would existing auto crash tests hold up well under a rigorous safety examination?

Test Models

Today's crash tests come in two basic models, neither of which has lots of fancy options. The first model is a 30 mph frontal crash done by automakers. The second is a similar 35 mph crash test conducted by the National Highway Traffic Safety Administration (NHTSA). Many people would like to add a third model — side-impact crash-testing — but numerous delays, including a dispute over design of the dummies to be used in the test, have kept that model on the drawing board for years.

The 30 mph test is done to every type of passenger car that automakers put in their showrooms. Manufacturers smash up hundreds of cars each year at private testing facilities to ensure that their designs meet federal safety performance requirements. The results of those tests are not made public, and auto manufacturers are

This crash test, featured in TV commercials, put a living person behind the wheel to demonstrate the efficacy of air bags. (Chrysler Corporation photo.)

required only to certify that each model meets NHTSA safety standards. Occasionally, NHTSA double-checks an automaker's certification by buying a vehicle and testing it for compliance.

All passenger cars sold today must pass the 30 mph test. To do so, they must meet an array of testing requirements. For example, forces on instrumented dummies in each car must be below specified levels, the steering column cannot move rearward more than a certain amount, the windshield must be retained in place and the hood of the car cannot come close to a defined area around the windshield. The dummies in the car must not experience an impact that would kill or seriously injure people.

NHTSA's dummy is too much of a, well, dummy.

Auto-safety experts say the 30 mph crash test requirements have been a success. In fact, similar tests involving dummies were used to establish federal rules on safety belts and child restraints.

"I think there is no question that the 30 mph standards have clearly upgraded the safety of cars," O'Neill says.

But the 30 mph test is only half the battle for a new auto model. The more popular auto models must also undergo NHTSA's 11-year-old New Car Assessment Program, which includes a 35 mph crash into a concrete wall.

The 35 mph crash test is more helpful to consumers trying to compare the safety features of various models. Each year, NHTSA buys 30 to 40 vehicles, puts instrument-laden dummies into the driver and passenger seats, and crashes the cars into an unyielding wall, which reproduces the crash forces of two same-sized cars colliding at 35 mph or an auto traveling at 70 mph hitting a parked car. Such a crash is more serious than most highway accidents because even on high-speed roads, drivers generally hit the brakes before impact.

"It's a very severe test," says Tim Hurd, NHTSA's chief of public affairs. "All of the energy of the crash goes into crumpling up the car. The wall does not move or change its momentum."

Help for Car Buyers

Although NHTSA has, until recently, labeled its New Car Assessment Program "experimental," O'Neill says it has been quite helpful for consumers. NHTSA publishes the test results to help car buyers compare the safety performance of various models in the same weight class.

"It clearly is a measure of how well the cars are doing in frontal crashes. It tells you quite a bit. The frontal crash is the crash that accounts for 50 percent of the deaths and serious injuries on the highways," O'Neill says.

In fact, calling the New Car Assessment Program "experimental" was simply "sort of a euphemism for saying that (the tests) still are somewhat unpopular among the manufacturers," O'Neill says.

But those tests are part of a focus on auto safety that has been growing more popular with the public. The old adage that safety doesn't sell has been buried under a barrage of new advertising emphasizing the protection that various models offer their occupants.

One current advertising theme, for example, is: "Building a safer automobile, Cadillac style." A 30-second network TV spot for Chrysler Corp. this year showed a real driver walk away unharmed after crashing a Plymouth Acclaim into a steel wall at 20 mph Chrysler is also making the air bags it installs in all its domestic cars part of its "Advantage: Chrysler" ad campaign. Audi is trumpeting the success of its air-bagged Audi 100, which received the top rating in recent NHTSA crash tests. An ad for Subaru depicts a Subaru Legacy wagon braking just short of a wall to show off the vehicle's anti-lock brakes.

Public Interest in Safety

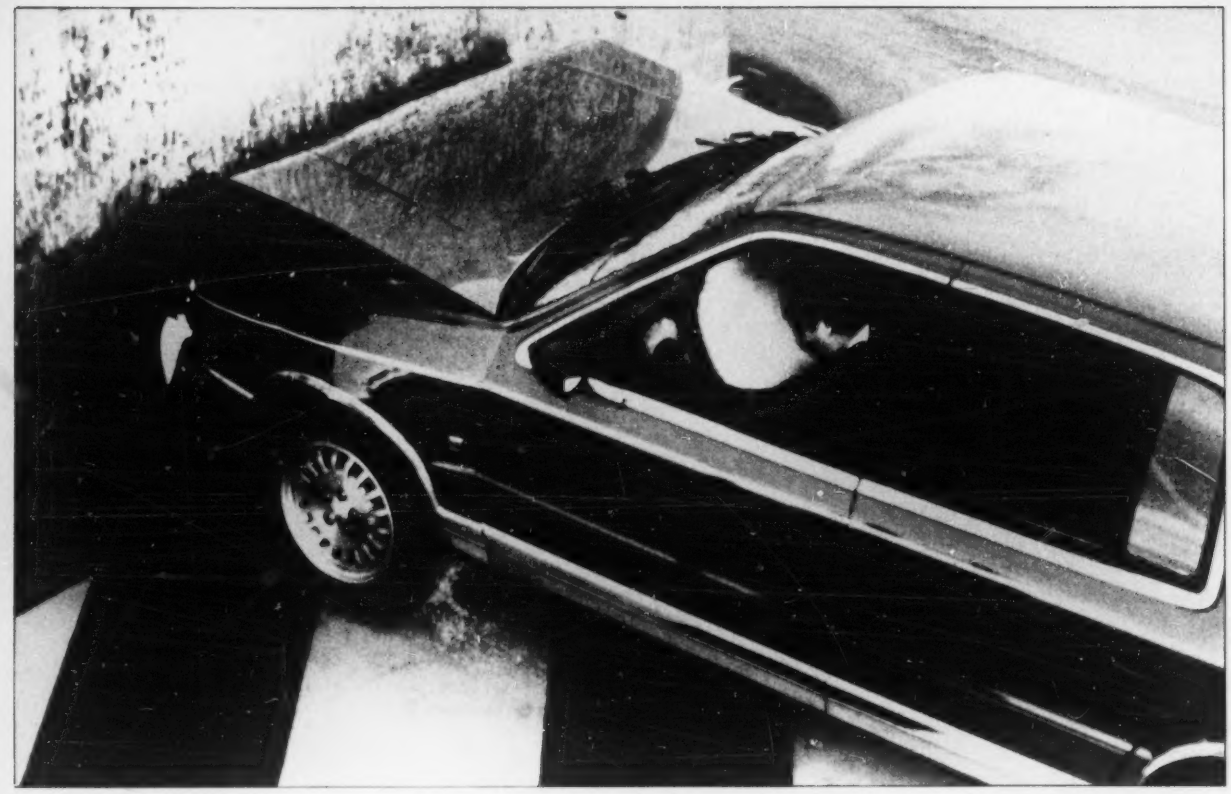
Why is the public suddenly more interested in safety?

"I think there are a lot of things that may be contributing to it: the fact that we are more health conscious and the fact that people are much more aware of the risks of the highway because of traffic densities and the speeds that they are traveling at," O'Neill says.

That's why Rosemary Dunlap, president of Motor Voters, says it's time to increase NHTSA's funding for crash testing above the $980,000 allocated for the 1990 fiscal year. Motor Voters is a nonprofit group of several hundred dues-paying members that helped enact California's "lemon law," regulating defective cars in 1979 when Dunlap lived in that state. Today, Motor Voters is based in Dunlap's new home in McLean, Va., and is dedicated to making cars safer. Dunlap now credits NHTSA and its director, retired Army Gen. Jerry Ralph Curry, with rejuvenating the agency's commitment to educating the public about the need to have both seat belts and air bags.

Existing tests don't even measure for side impact.

"There is widespread support for NHTSA research funding because you get such tremendous benefits from those programs," Dunlap says. "Auto accidents are the leading cause



of death among people under 45. We lose more potential years of life to car crashes than to any other cause. Car crashes also are the leading cause of brain injury, spinal injury, epilepsy, quadriplegia and paraplegia, and they are a leading cause of blindness."

More funding is needed partly because crash-testing is an expensive program, one that is done by no government outside the United States, Dunlap says. More money would allow a wider range of tests.

Only a "Snapshot"

One weakness of the existing New Car Assessment Program is that the 35 mph crash tests provide only a "snapshot" of how a particular model performs in one type of accident. The test measures only three types of injuries on a dummy of just one size. Cars that outperform other models in that test wouldn't necessarily do so at other speeds or in side crashes, off-center frontal crashes or rollovers. In fact, NHSTA's frontal-only crash-testing may have resulted in cars designed to do well in those tests at the expense of being as safe as possible in other types of crashes.

On the other hand, cars that do poorly in crash tests don't necessarily compile substandard safety records in actual highway experience. A 1984 study by the Insurance Institute for Highway Safety indicated that drivers of cars with poor scores in the 35 mph crash test were more likely to be killed than drivers of vehicles with good scores. But that conclusion doesn't apply universally. For example, the 1989 Peugeot 505S, a medium-sized car, fared so poorly in the NHTSA test that *Consumer Reports* magazine concluded a human occupant probably would not have survived it. Motor Voters has analyzed Peugeot's test results since 1979 and has advised people not to buy one. But actual highway accident data, which are affected by the types of people who drive certain cars as well as road conditions, show that people in Peugeots are not injured more frequently than people in most other types of cars. A spokesperson for Peugeot of America told *The New York Times* that crash tests don't take into account features that help drivers avoid accidents, such as rack-and-pinion steering, independent suspension and anti-lock brakes. Other safety features not present in all cars include rear-seat shoulder straps, automatic belt systems, designs offering maximum visibility and high-traction tires.

Automakers don't have to release test results.

Highway Experience

Another factor that skews NHTSA's test results is that in actual highway experience, heavier cars fare better than lighter ones because they absorb less of the impact. Theoretically, in a crash between a large car and a small one, the large car could experience forces significantly less than those in NHTSA's 35 mph crash while the small car would be crumpled by forces that were measurably greater. Even if the smaller car had outscored the larger one in the NHTSA tests, it wouldn't necessarily do so on the highway. That's why NHTSA advises consumers to use the test results only to compare models that have weight differences of 500 pounds or less.

A third factor that makes NHTSA's test results hard for consumers to analyze is that injury ratings recorded by dummies don't reflect the difference in impact severity between hitting an air bag and slamming into part of the car's interior. A head-in-

jury criteria index (HIC) of 900 is less serious if the dummy hits an air bag than if it reflects a person hitting a forehead on a steering wheel because the air bag disperses the impact. (An HIC of 1,000 is the threshold above which serious injury or death can be expected. The dummies also record chest-acceleration forces and impact on each femur.)

NHTSA test results of the two-door Toyota Celica with air bags showed the Toyota had an HIC of 834 while the Mitsubishi Eclipse with motorized seat belts had a driver's HIC of 772, Dunlap says. But in an actual accident, a person might be better off in the Toyota because the ability of the air bag to spread out the impact would more than make up for the higher HIC, she says. The difference is even more pronounced in chest-impact tests.

Starting with the 1990 model year, all cars were required to have automatic safety belts or air bags. Last winter, NHTSA announced it plans to extend those requirements for automatic crash protection to vans and light trucks.

Results Don't Apply

Even if a car has an air bag, the test dummies are securely belted into place before the crash. Therefore, NHTSA's tests results don't apply to motorists who don't wear seat belts or who don't keep the belts snug.

Kennerly Digges, who worked at NHTSA for 15 years and who directed the agency's crash-testing program, says one of the key problems of the tests is that NHTSA's dummy is too much of a, well, dummy. The dummy was designed some two decades ago to measure the effectiveness of seat belts in reducing injuries, and it isn't sophisticated enough to accurately gauge forces on restrained passenger dummies, Digges says.

"A very serious problem I see right now is the fact that the dummy that is used in frontal testing has not advanced with the same rapidity as the protection," says Digges, who now is a professor of engineering at University of Virginia, Charlottesville. "The dummy is still an instrument that is basically designed to tell the difference between occupants who are restrained and unrestrained. . . . Now you are trying to use that unsophisticated dummy to measure something much more precise."

But declining budgets at NHTSA in recent years mean the agency doesn't have $10 million to $12 million to develop a new dummy, he says.

How can consumers get a clearer picture of which cars are safer?

"The first priority would be to get more accurate information in frontal crash tests. . . . Some people would advocate that automakers should release data on the (30 mph) testing they do and should be required to test in many configurations and report on that," Dunlap says. "This would give a number of benefits. You would get more data on such things as angle crashes and side-impact crashes for less cost than is being assumed by the government.

"Now you are getting one snapshot of a vehicle and how it is performing, and you could get a lot more information if you had a lot more snapshots."

NHTSA originally did provide additional "snapshots" by doing some angle and rear crash tests, but the agency gradually phased those tests out. However, an important new snapshot will become available in future years through side-impact crash-testing.

Cars with poor test grades are not necessarily unsafe on the highway.

Side Crashes

Each year, about 8,000 people die and 23,000 are injured seriously in accidents in which autos are struck from the side. Side-impact crashes cause more highway injuries than any other type of crash, except frontal collisions. Studies by General Motors Research (GMR) have found that side crashes account for some 32 percent of fatalities. While most frontal collisions occur at night and generally involve young people and a high incidence of drug or alcohol involvement, most side crashes happen in daytime and involve older drivers with little drug or alcohol impairment, GMR research shows.

The importance of side-crash testing may grow as the installation of air bags blurs differences among cars in frontal crashes. When air bags are added to cars, the wide range of test results from model to model narrows.

For years, federal officials have considered requiring automakers to meet side-crash standards. To meet those standards under the original federal proposal, automakers would have had to use a new dummy called Sid (Side Impact Dummy) that was developed by government researchers to record impact forces when a car collides sideways with either stationary or moving objects.

Sid and Family

But automakers, including General Motors, worried that Sid may not be up to the job. GM designed a different dummy, Biosid, and there is a third dummy as well, Eurosid, developed by a consortium of European car producers. Unlike Sid, which is armless, Biosid and Eurosid have arms. All three dummies include sensors and other instruments to measure the force of side-impact crashes.

Critics argued that delays in setting side-impact standards benefitted automakers economically while people continued to die unnecessarily in accidents. The Center for Auto Safety, a 20-year-old nonprofit organization based in Washington, D.C., called the search for an ideal side-impact requirement and test dummy "paralysis by analysis." The center has proposed a set of tests and strict injury criteria that it estimates could save 1,000 lives a year.

Deaths or injuries frequently occur in side-impact crashes when people are thrown out of vehicles or rammed by door parts. Side-impact crash-testing could help lead to new designs, such as energy-absorbing body panels or redesigned padding and arm rests, that could reduce highway casualties. Passenger cars now are required to have beams in the side doors, but they have not had to meet any testing requirements.

"There is no question that getting a dynamic crash-test standard for side impacts has taken longer than it should have," O'Neill says.

Meanwhile, safety activists say more reliable information for safety-conscious consumers will translate into a stronger marketplace for safer cars. And that, they say, is the best way to get automakers to improve designs. Their fear is that the push for significantly better crash-testing data, in an era of tight government budgets, could wind up hitting a brick wall of its own.

NEW PRODUCTS

Photocop

Automated enforcement of speed laws is now available to law enforcement agencies. PhotoCop, the new photo-radar system designed and manufactured by Traffic Monitoring Technologies, is the most advanced traffic radar device available.

The PhotoCop unit includes a 70-mm camera to obtain quality photographs, a VCR to record traffic and speed, a lap-top computer for operator use, a display mounted on the front of the vehicle to show the violator's measured speed, and a narrow, low-power Ka Band radar that is virtually undetectable until the violator is only a few feet away.

— **Traffic Monitoring Technologies,** 820 S. Friendswood Dr., Suite 204, Friendswood, TX 77546.

HEATED WIPERS

Northland Engineered Products, Inc., Westboro, Mass., has introduced a line of heated windshield wipers for class 6, 7, and 8 trucks. The wipers are wired directly into the ignition system for immediate de-icing while the vehicle warms up.

Rather than thermostats or external devices, these wipers have built-in etched foil heating elements over the entire blade that maintain a minimum of 50°F at −60°F to +100°F.

The Northland Heated Windshield Wipers are available in 13-, 14-, 16-, 18-, and 20-inch sizes; come with 6-foot dual-lead wires and an adapter to fit most wiper arms; and are stainless steel with a no-glare black finish. Replaceable blades, available from Nordel, are designed for year-around use.

— **Northland Engineered Products, Inc.,** 190 Turnpike Rd., P.O. Box 1107, Westboro, MA 01581.

CORSAIR FENDER

The Corsair fender, introduced by The Worthington Group, Inc., is aerodynamically designed to control splash and spray. A patented "air scoop" collects and directs airflow across the top of the wheels, behind the rear wheels, and onto the road's surface.

The Corsair's patented design, which can be used on tractors or trailers, improves driver visibility and protects valuable equipment. According to The Worthington Group, tires and brakes operate more efficiently and the appearance of the equipment is enhanced. The Corsair is available in steel, stainless steel, or aluminum. In addition, custom building is available for single or dual wheels and single-, tandem-, or three-axle applications. — **The Worthington Group, Inc.,** P.O. Box 558, Hunt Valley, MD 21030.

NEW DOLLY

The Clayton BackSaver 710 is a dolly designed to save time, reduce labor costs and prevent back injury.

Engineers at Clayton Associates, Inc., designed the BackSaver for mechanics to eliminate muscle strain and back injury often experienced in attempts to remove brake hubs and drums that weigh 250 pounds or more.

The pivot point of the BackSaver is beneath the center of mass, providing balance. One mechanic can maneuver the BackSaver to loosen and remove the hub and drum. Whereas conventional dollies make it almost

impossible to apply appropriate leverage, the height of the BackSaver can be adjusted so the drum can be centered with the axle and easily removed from the wheel.

The BackSaver is equipped with 8-inch wheels that glide over rough, uneven shop floors and can be used with spoke or disk wheels, outboard mounted drums, and on heavy-duty vehicles with disc brakes. It can be used with drums with diameters of 15 inches or greater. — **Clayton Associates, Inc.,** Farmingdale, NJ 07727-0589.

FAST-DRYING PAINT

Du Pont Company has developed a new line of chlorinated film-forming resins to replace chlorinated rubber as a binder in traffic and maintenance paints. Through a new process, Du Pont has combined the adhesion, chemical inertness, and barrier properties of chlorine with the improved adhesion and flexibility features of ethylene/vinyl acetate copolymers in the formulation of the "Hypalon" CP 100 series.

Used in traffic paints, they offer shorter drying times; adhesion to asphalt, concrete, and glass beads, which provide enhanced visibility; durability; chemical and yellowing resistance; stability; compatibility with existing products and equipment; and cost-effectiveness compared with conventional paint formulas that use chlorinated rubber. The new resins have passed tests in six states and have already been named in some paint formula specifications. — **Du Pont,** Chemicals and Pigments Department, Wilmington, DE 19898.

EVENTS

The Fleet's In

SEPTEMBER

Motor Fleet Safety Supervision — "Motor Fleet Safety for Supervisors," Sept. 11-13, Penn State University. — Motor Fleet Supervisor Training, Office of Executive Director, A364 Engrg. Bldg., Michigan State University, East Lansing, MI 48824-1226. (517) 353-1790.

Principles of Fleet Administration Safety — Sept. 24-26, Chicago, Ill. — National Safety Council, 444 N. Michigan Ave., Chicago, IL 60611. (312) 527-4800, extension 8405.

Motor Fleet Maintenance Supervision — "Maintenance of Commercial Vehicles, Phase A," Sept. 25-27, Penn State University. — Motor Fleet Supervisor Training, Office of Executive Director, A364 Engrg. Bldg., Michigan State University, East Lansing, MI 48824-1226. (517) 353-1790.

OCTOBER

Motor Fleet Accident Investigation Workshop — Oct. 1-2, Chicago, Ill. — National Safety Council, 444 N. Michigan Ave., Chicago, IL 60611. (312) 527-4800, extension 8405.

Motor Fleet Maintenance Supervision — "Maintenance of Commercial Vehicles, Phase B," Oct. 2-4, Michigan State University; "Advanced Maintenance Management," Oct. 16-18, University of Delaware — Motor Fleet Supervisor Training, A364 Engrg. Bldg., Michigan State University, East Lansing, MI 48824-1226. (517) 353-1790.

Motor Fleet Safety Supervision — "Motor Fleet Trainers," Oct. 9-11, "Accident Investigation," Oct. 22-24, "Advanced Accident Investigation," Oct. 25-26, Penn State University; "Motor Fleet Safety for Supervisors," Oct. 23-25, Michigan State University — Motor Fleet Supervisor Training, A364 Engrg. Bldg., Michigan State University, East Lansing, MI 48824-1226. (517) 353-1790.

National Safety Council Congress And Exposition

78th Annual, Oct. 28-Nov. 2, 1990, Las Vegas, Nev. Sponsored by the National Safety Council.

Congress events are presented Oct. 28-Nov. 2. For more information about the Congress, contact Congress Planning, National Safety Council, 444 N. Michigan Ave., Chicago 60611, or (312) 527-4800.

The exposition will be open Oct. 30-Nov. 1. For more information about the Exposition of Safety and Health Equipment, Devices, and Services, contact Exposition Manager, (same address).

1990 International Congress on Transportation Electronics — "Vehicle Electronics in the 90s," Oct. 15-17, Dearborn, Mich. — Convergence '90, Mone Asensio, SAE, Detroit Branch, 3001 W. Big Beaver Rd., Suite 320, Troy, MI 48084. (313) 649-0420; Fax (313) 649-0425.

1990 SAE Truck & Bus Meeting & Exposition — Oct. 29-Nov. 1, Detroit, Mich. — Alison Frederick, SAE World Headquarters, Dept. 935, 400 Commonwealth Dr., Warrenville, PA 15096. (412) 772-7131.

NOVEMBER

Motor Fleet Maintenance Supervision — "Maintenance of Commercial Vehicles, Phase B," Nov. 6-8, University of Alabama; "Maintenance Management," Nov. 27-29, Michigan State University. — Motor Fleet Supervisor Training, Office of Executive Director, A364 Engrg. Bldg., Michigan State University, East Lansing, MI 48824-1226. (517) 353-1790.

DDC-Professional Truck Driver — Nov. 26-28, Chicago, Ill. — National Safety Council, 444 N. Michigan Ave., Chicago, IL 60611. (312) 527-4800, extension 8405.

DDC-Coaching the Mature Driver — Nov. 29-30, Chicago, Ill. — National Safety Council, 444 N. Michigan Ave., Chicago, IL 60611. (312) 527-4800, extension 8405.

DECEMBER

Motor Fleet Maintenance Supervision — "Maintenance Management," Dec. 4-6, University of Delaware. — Motor Fleet Supervisor Training, Office of Executive Director, A364 Engrg. Bldg., Michigan State University, East Lansing, MI 48824-1226. (517) 353-1790.

DDC-Attitudinal Dimensions of Driving — Dec. 4-6, Chicago, Ill. — National Safety Council, 444 N. Michigan Ave., Chicago, IL 60611. (312) 527-4800, extension 8405.

DDC-8 — Dec. 10-12, Chicago, Ill. — National Safety Council, 444 N. Michigan Ave., Chicago, IL 60611. (312) 527-4800, extension 8405.

DDC-4 — Dec. 13-14, Chicago, Ill. — National Safety Council, 444 N. Michigan Ave., Chicago, IL 60611. (312) 527-4800, extension 8405.

JANUARY 1991

Symposium on Work Zone Traffic Control — Jan. 18-19, Orlando, Fla. — Federal Highway Administration, (703) 285-2517; or Bellomo-McGee, Inc., 8330 Boone Blvd., Vienna, VA 22182. (703) 847-3071.

LIBRARY

Please Note: *Library is prepared by the National Safety Council Library — Robert Marecek, manager. The National Safety Council Library is unable to supply any of the materials listed here. For your convenience, the names and addresses of the publishers are listed.*

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Highway Safety Symposium

Corridor improvement and pedestrian safety are focuses

BY JIM CASTELLI

ON JUNE 12 through 14, 1990, 250 state, federal, local and private traffic safety experts met at a symposium sponsored by the National Highway Traffic Safety Administration and the Federal Highway Administration (FHWA) to develop short-term highway safety strategies. The FHWA will have an action plan ready by Sept. 1 and will begin implementing it by Oct. 1.

The symposium was designed to identify countermeasures that could be accomplished within two years. The group produced more than 50 recommendations in five major categories:

- Corridor identification and improvement.
- Pedestrian safety.
- Commercial motor vehicle safety.
- Reducing accident severity.
- Improving driver performance and control.

An FHWA source indicates that the agency does not have the resources to begin work on all of the recommendations and that the most likely areas of focus will be corridor improvement and pedestrian safety.

A background paper on corridor improvement distributed at the symposium noted that "Every state has arterial corridors with severe safety problems. Approximately 50 percent of the fatalities and 30 percent of the injuries occur on the arterials."

"Many of these corridors are categorized as free access, high volume facilities with speeds of 40 miles per hour or greater and adjacent commercial strip development," the paper continued. "In many cases, these safety problems cannot be readily resolved by replacing the existing free access highway with an expressway/freeway because of major financial, environmental or social impacts."

The corridor safety program attacks the problem with a comprehensive approach that integrates highway improvements, driver performance, type of vehicle and emergency medical services initiatives.

The background paper described a major corridor improvement program in Pennsylvania that targeted 55 corridors, ranging in length from one to 72 miles. Corridors chosen were considered to have the greatest potential to reduce accidents significantly through the implementation of low-cost safety improvements and were unlikely to undergo major reconstruction or be replaced in the near future.

Pennsylvania officials identified a 14-point plan, including improvements in signs and pavement markings, speed limit reductions, increased local police enforcement, installation of concrete median barriers, placement of anti-skid pavement surfaces and the establishment of sites designated for truck inspections. Other points addressed were as follows:

- Highway initiatives included an analysis of the location of accident clusters and the identification of roadway deficiencies.
- Driver performance initiatives included educational and media campaigns aimed at safe driving and selective law enforcement, including a "safety blitz" involving simultaneous surveillance by several police departments along a given corridor.
- Vehicle initiatives included truck inspections and encouraging motorists to be aware of their vehicle's condition at all times.
- Emergency medical services initiatives included quicker response times and transfer of accident victims to appropriate medical facilities.

Although the Pennsylvania program is still in the early stages of evaluation, a study of one corridor, Route 65 in Allegheny County, found a 22 percent reduction in the total number of accidents, a 67 percent reduction in alcohol-related accidents and a 41 percent reduction in the accident rate.

A background paper on pedestrian safety noted that pedestrian fatalities — approximately 7,000 per year — account for 16 percent of all highway-related deaths. Children aged 5 to 15 years are over-represented in those deaths, and in some major metropolitan areas, pedestrian deaths account for 40 to 50 percent of all traffic fatalities.

The background paper also noted that more than 70 percent of all identified behavioral errors in pedestrian crashes are on the part of the pedestrians. Local jurisdictions have used a variety of approaches to emphasize pedestrian safety — education campaigns, re-timing stoplights to allow longer crossing times, refurbishing pavement markings, installing pedestrian signals, widening crosswalks, increasing the size of pedestrian islands and installing new signs.

Targeted programs have been successful. In New York, pedestrian deaths and severe injuries declined by more than 50 percent 30 months after a program was launched. In Seattle, pedestrian accidents declined from an average of 476 per year from 1974 to 1979 to 430 in 1980.

Supreme Court Gets Tough

Two recent U.S. Supreme Court rulings provide police with increased authority in enforcing laws against drunk driving.

In the first decision, the court ruled 6-3 that police can stop motorists at sobriety checkpoints, indicating that such tactics do not violate privacy rights. The ruling upheld Michigan's sobriety checkpoint program and, by

extension, similar programs in most states.

In the second decision, the court ruled 8-1 that police may videotape or record the responses of suspected drunk drivers. It was decided that police were not in violation of a Pennsylvania man's rights when, without warning him of his rights, they recorded his answers to questions regarding his height, weight and eye color.

The lower courts had been split on the question of sobriety checkpoints: some had upheld the use of checkpoints at which all motorists are stopped and checked for signs of intoxication, while others, such as those in Michigan, had barred police from using checkpoints.

"No one can seriously dispute the magnitude of the drunken driving problem or the states' interest in eradicating it," Chief Justice William H. Rehnquist wrote. "Conversely," he continued, "the weight bearing on the other scale — the measure of the intrusion on motorists stopped briefly at sobriety checkpoints — is slight."

Drunk drivers killed approximately 23,000 people nationwide last year. President Bush cited the seriousness of the drunk driving problem and last December asked state and local governments to step up the fight against drunk drivers. "It's as crippling as crack, as random as gang violence, and it's killing more kids than both combined," he said. The federal government is supplying aid to promote the use of sobriety checkpoints.

Joining Chief Justice Rehnquist were justices Byron R. White, Sandra Day O'Connor, Antonin Scalia and Anthony M. Kennedy; Justice Harry A. Blackmun supported the outcome but was not part of Rehnquist's majority opinion, and justices William J. Brennan, Thurgood Marshall and John Paul Stevens dissented.

"I do not dispute the immense social cost caused by drunken drivers, nor do I slight the government's efforts to prevent such tragic losses," Justice Brennan wrote. He added, however, that "In the face of the 'momentary evil' of drunken driving, the court Thursday abdicates its role as the protector of" the fundamental right of individual privacy.

Michigan state police first used sobriety checkpoints, which were modeled after those designed for a program in Maryland, in 1986. At a checkpoint site, police directed all traffic headed in one direction to a roadside area where officers talked to motorists.

If no immediate evidence of intoxication was detected, the motorist was given a traffic safety brochure and allowed to drive away. The average delay was approximately 30 seconds. If signs of intoxication were detected, the driver was directed to another area for further questioning and perhaps a breath test.

Six Michigan legislators filed suit against state police soon after the checkpoint program was initiated, alleging that the checkpoints violated the Fourth Amendment's ban on unreasonable police seizures and searches (*State Police vs. Sitz, 88-1897*).

In the videotaping case, the Supreme Court ordered a state court to consider reinstating the drunk driving conviction of Inocencio Muniz. A police officer in Upper Allen Township, Pa., noticed Muniz's car stopped by the side of the road on Nov. 30, 1986, with the motor running. The officer reported that he smelled alcohol on Muniz's breath and that his eyes were glazed and bloodshot. The officer said that he told Muniz not to drive until he was in a condition to operate the car safely, but Muniz drove off as the officer returned to his patrol car. The patrolman pursued Muniz, ordered him to stop and told him to perform some sobriety tests; Muniz failed all the tests.

The officer then took Muniz to a police station where the motorist was videotaped answering questions about his height, weight, eye color and other personal characteristics. Only after those responses was Muniz read the so-called Miranda warnings about his right to a lawyer and to remain silent.

Muniz, previously convicted of drunk driving, was convicted again and sentenced to 45 days to 23 months in prison. A Pennsylvania appeals court threw out the latter conviction in 1988, a ruling subsequently thrown out by the Supreme Court.

Justice William J. Brennan wrote that the judge who convicted Muniz was entitled to hear the slurred manner of speech in which Muniz responded to the questions. Brennan did concede, however, that police improperly asked Muniz to state the date of his sixth birthday, indicating that Muniz's response to that question amounted to testimony and that Muniz first should have been read the Miranda warnings. Unlike Muniz's responses to the other questions, Brennan continued, his response to the question concerning his sixth birthday was incriminating because of its content and not just because of the delivery.

Four justices — Rehnquist, White, Blackmun and Stevens — indicated that they would permit the question as well. Justice Thurgood Marshall dissented, however, voting to bar Muniz's conviction. The case is *Pennsylvania vs. Muniz, 89-213.*

Poll Addresses War on Drugs

A Media General–Associated Press poll conducted in May 1990 found that Americans have less confidence in President Bush's war on cocaine than they did in September 1989. The poll also revealed that Americans are increasingly concerned about drug abuse in their neighborhoods.

Nearly half the respondents indicated that drugs are a serious problem where they live, a 40 percent increase from last September when President Bush announced his anti-drug campaign.

More than 40 percent of the respondents younger than 45 years said that they know a cocaine user.

While most respondents believed the government can reduce drug abuse, 55 percent expected the problem to worsen. In September, just after Bush declared war on drugs, 74 percent of Americans believed the administration was making a serious effort to combat illegal drug use, a figure that decreased to 59 percent in the new survey.

At the same time, 18 percent responded that the problem of drug abuse is "very serious" in their own neighborhoods — up from 14 percent in September — and 30 percent said it was "somewhat serious," up from 26 percent in September.

Despite concerns, the poll revealed a sharp decline in the number of Americans who cited drug abuse as the nation's greatest problem, a decrease from 61 percent after Bush's speech to 24 percent. This gauge is one of the most sensitive to publicity, however, and Bush's remarks capped a summerlong media focus on the drug crisis. Although it fell sharply in the new survey, drug abuse remained the most often cited problem facing the country, followed by the federal deficit, named by 15 percent.

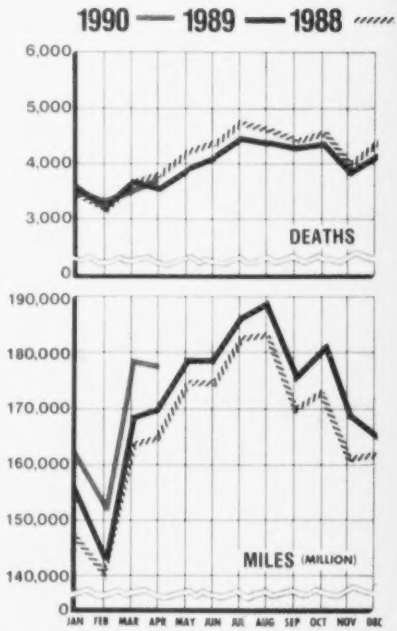
April Traffic Deaths Up 2%

BY MARY E. JOHNSTON and URSULA ZUEHLKE

TRAFFIC SUMMARY

Month	Deaths 1990	Deaths 1989	Change
April	3,620	3,540	+ 2%
4 months	13,830	13,840	– *%
12 months (Ending April, 1990)	46,990	48,860	– 4%

*Less than 0.5%



Motor-vehicle deaths in April totaled 3,620, an increase of 2 percent from the April 1989 total of 3,540.

Deaths for the four-month period ending April totaled 13,830, a decrease of less than 0.5 percent from the 1989 four-month total of 13,840.

Disabling injuries for 1990 are estimated to be almost 500,000. These are injuries resulting in disability beyond the day of the accident, and do not include minor injuries, which probably totaled as many more.

The cost of motor-vehicle accidents for 1990 is estimated at almost $20 billion.

Based on preliminary vehicle mileage reports for this year, the estimated mileage death rate for the entire year is 2.3 (deaths per 100 million vehicle miles).

State Experience

Among the 47 states reporting April experience, 24 states had fewer deaths than in the preceding April, and 22 states showed increases in deaths. One state and the District of Columbia showed no change in the number of fatalities. For the four-month period, 26 states and the District of Columbia showed decreases in the number of deaths, while 20 states showed increases. One state recorded the same number of deaths both years.

Nebraska	–35%
New Hampshire	–35%
Vermont	–31%
Maine	–26%
West Virginia	–24%
New Mexico	–21%
Arkansas	–17%
Massachusetts	–17%
Arizona	–13%
Ohio	–11%
Rhode Island	–11%
California	– 9%
North Carolina	– 9%
Michigan	– 8%
South Dakota	– 8%
Wyoming	– 8%
Colorado	– 6%
Florida	– 6%
Illinois	– 6%
South Carolina	– 6%
Mississippi	– 4%
New Jersey	– 2%
New York	– 1%
Tennessee	– 1%
Texas	– 1%
Wisconsin	– 1%

State Traffic Deaths

Deaths are reported by state traffic authorities. All figures are preliminary. To ensure proper comparisons, 1988 and 1989 figures cover the same reporting period as those for 1990.

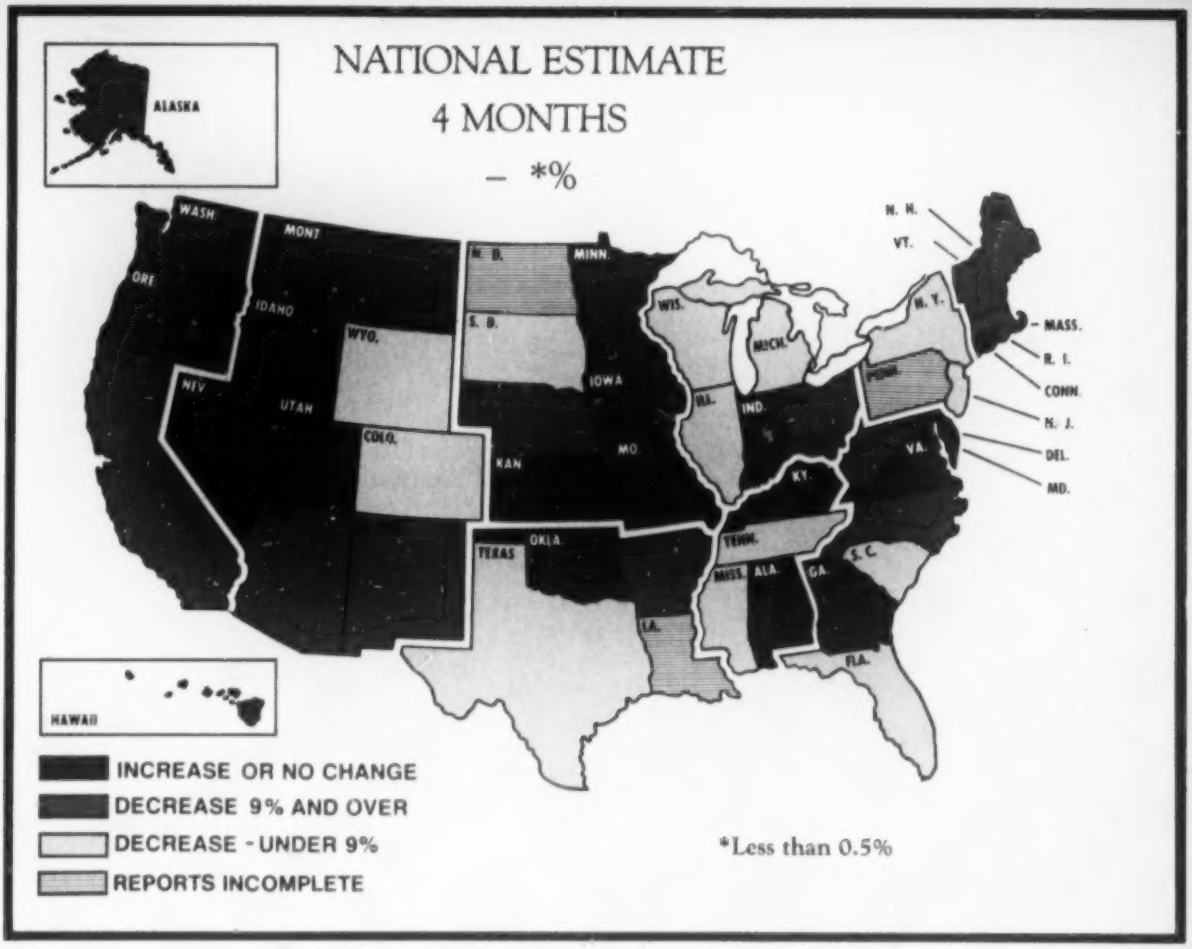
Population Rate: U.S. population rate and state population rates are the estimated annual number of deaths per 100,000 population. U.S. population rate is based on July 1, 1990, population estimate; state population rates are based on July 1, 1989, population estimates, U.S. Bureau of the Census, Washington, D.C.

States shown in CAPS had fewer deaths in 1990 than they did in 1989 for the same reporting period.

Mileage Rate: The number of deaths per 100 million vehicle miles of travel.

STATE	NO. OF MOS.	DEATHS IDENTICAL PERIODS 1990	1989	1988	PERCENT CHANGES 1989 TO 1990	1988 TO 1990	1990 POP. RATE	1990 MILE. RATE
Total U.S.	**4**	**13,830**	**13,840**	**13,880**	**- *%**	**- *%**	**18.7**	**2.3**
Alabama	4	331	297	300	+ 11%	+ 10%	24.1	2.2
Alaska	4	27	17	22	+ 59%	+ 23%	15.4	2.3
ARIZONA	4	237	272	239	- 13%	- 1%	20.0	2.1
ARKANSAS	4	139	168	157	- 17%	- 11%	17.3	2.1
CALIFORNIA	4	1,389	1,534	1,490	- 9%	- 7%	14.3	1.6
COLORADO	4	119	127	146	- 6%	- 18%	10.8	1.4
Connecticut	4	120	115	122	+ 4%	- 2%	11.1	1.4
Delaware	4	52	35	61	+ 49%	- 15%	23.2	2.4
D. OF C.	4	13	31	15	- 58%	- 13%	6.5	1.2
FLORIDA	4	1,018	1,081	1,030	- 6%	- 1%	24.1	2.9
Georgia	4	485	464	491	+ 5%	- 1%	22.6	2.2
Hawaii	4	46	46	47	0%	- 2%	12.4	1.7
Idaho	4	55	42	49	+ 31%	+ 12%	16.3	1.9
ILLINOIS	4	445	474	469	- 6%	- 5%	11.5	1.7
Indiana	4	278	263	294	+ 6%	- 5%	14.9	1.6
Iowa	4	129	128	133	+ 1%	- 3%	13.6	1.7
Kansas	4	138	118	124	+ 17%	+ 11%	16.5	2.0
Kentucky	4	268	239	235	+ 12%	+ 14%	21.6	2.4
Louisiana	2	125	95	105	+ 32%	+ 19%	17.1	2.1
MAINE	4	49	66	63	- 26%	- 22%	12.0	1.3
Maryland	4	217	212	233	+ 2%	- 7%	13.9	1.7
MASSACHUSETTS	4	176	212	153	- 17%	+ 15%	8.9	1.3
MICHIGAN	4	384	419	429	- 8%	- 10%	12.4	1.5
Minnesota	4	130	126	138	+ 3%	- 6%	9.0	1.0
MISSISSIPPI	4	212	221	204	- 4%	+ 4%	24.3	2.9
Missouri	4	289	272	300	+ 6%	- 4%	16.8	1.9
Montana	4	52	41	50	+ 27%	+ 4%	19.4	2.0
NEBRASKA	4	55	85	68	- 35%	- 19%	10.2	1.2
Nevada	4	100	65	75	+ 54%	+ 33%	27.0	3.1
NEW HAMPSHIRE	4	36	55	34	- 35%	+ 6%	9.8	1.1
NEW JERSEY	4	282	289	301	- 2%	- 6%	10.9	1.4
NEW MEXICO	4	128	162	121	- 21%	+ 6%	25.1	2.5
NEW YORK	4	567	574	506	- 1%	+ 12%	9.5	1.6
NORTH CAROLINA	4	386	424	428	- 9%	- 10%	17.6	2.0
North Dakota	2	10	4	10	+ 150%	0%	9.1	1.1
OHIO	4	395	443	452	- 11%	- 13%	10.9	1.4
Oklahoma	4	192	177	153	+ 8%	+ 25%	17.9	1.8
Oregon	4	165	155	178	+ 6%	- 7%	17.6	2.0
Pennsylvania	2	244	249	207	- 2%	+ 18%	12.2	1.8
RHODE ISLAND	4	32	36	41	- 11%	- 22%	9.6	1.7
SOUTH CAROLINA	4	312	332	298	- 6%	+ 5%	26.7	3.1
SOUTH DAKOTA	4	35	38	33	- 8%	+ 6%	14.7	1.6
TENNESSEE	4	322	326	348	- 1%	- 7%	19.6	2.0
TEXAS	4	956	968	975	- 1%	- 2%	16.9	1.9
Utah	4	79	57	64	+ 39%	+ 23%	13.9	1.9
VERMONT	4	25	36	30	- 31%	- 17%	13.2	1.3
Virginia	4	324	273	274	+ 19%	+ 18%	15.9	1.6
Washington	4	227	133	204	+ 71%	+ 11%	14.3	1.5
WEST VIRGINIA	4	119	156	146	- 24%	- 18%	19.2	2.4
WISCONSIN	4	189	191	178	- 1%	+ 6%	11.6	1.4
WYOMING	4	23	25	32	- 8%	- 28%	14.5	1.3
Puerto Rico[#]	2	86	103	114	- 17%	- 25%	18.9	—
Virgin Islands[#]	4	7	4	7	+ 75%	0%	37.8	—
— CANADIAN PROVINCES —								
Alberta	4	117	104	115	+ 13%	+ 2%	22.2	—
British Columbia	4	170	143	161	+ 19%	+ 6%	24.1	—

[#]Not included in the TOTAL U.S. death count or rates.
*Less than 0.5%.



MOTOR-VEHICLE DEATHS AND CHANGES TOTAL U.S.

	Deaths				Percentage Changes				
					Corresponding Month			4 Months Moving Avg. +	
Months	1987	1988	1989	1990	1988-1990	1988-1989	1989-1990	1988-1989	1989-1990
January	3,301	3,390	3,530	3,480	+ 3%		– 1%		– 4%
February	2,997	3,130	3,150	3,290	+ 5%		+ 4%		– 3%
March	3,517	3,600	3,620	3,440	– 4%		– 5%		– 3%
April	3,621	3,760	3,540	3,620	– 4%		+ 2%		– *%
4 Months	13,436	13,880	13,840	13,830	– *%		– *%		
May	4,264	4,210	3,860			– 8%		– 4%	
June	4,279	4,320	4,080			– 6%		– 5%	
July	4,472	4,720	4,440			– 6%		– 6%	
August	4,815	4,550	4,330			– 5%		– 6%	
September	4,300	4,370	4,250			– 3%		– 5%	
October	4,535	4,520	4,330			– 4%		– 4%	
November	4,169	3,980	3,790			– 5%		– 4%	
December	4,020	4,350	4,080			– 6%		– 5%	
TOTAL	48,290	48,900	47,000	46,990 ‡		– 4%			

The 1987 figures are from the National Center for Health Statistics. The 1988, 1989 and 1990 figures are National Safety Council estimates.

+Four Months Moving Average is based on changes between the totals for four months instead of one month. For example, the April figure shows the change between the totals for January 1989 - April 1989 and January 1990 - April 1990, etc. Adding several months together tends to smooth out single-month changes which may be affected by differences in the number of weekends in a month from one year to the next, random variations, etc.

‡ Deaths for the 12-month period ending April 1990.

*Less than 0.5%.

ADVANCE PROGRAM
National Safety Council Congress

OPENING SESSION

Monday, October 29 **8:00-10:00 AM**

- Annual Business Meeting

- **Keynote Address: The Honorable Elizabeth Dole, Secretary, U.S. Department of Labor**

- Exciting, state-of-the-art multi-media audio-visual presentation.

KEYNOTE SESSIONS

In addition to the Opening Session, the 1990 Congress will feature major keynote addresses on Tuesday and Wednesday of Congress week. The schedule at this time is as follows:

Tuesday, October 30 8:30-10:00 AM **Dr. William J. Bennett**
National Drug Policy
Director
(Invited)

Wednesday, October 31 8:30-10:00 AM **Gerard F. Scannell**
Assistant Secretary of
Labor, OSHA

BLOCKBUSTERS

MONDAY, OCTOBER 29 10:15-11:45 AM

SESSION 6 **OCCUPATIONAL SAFETY AND HEALTH PRIORITIES IN THE 1990S**

Program Developer: **CEMENT, QUARRY, AND MINERAL AGGREGATES SECTION**

Co-Sponsored By: **Industrial Division, Labor Division, Motor Transportation Division**

We have observed both MSHA and OSHA responding to safety and health concerns through the 1980s and we expect this response to continue into the 1990s as new safety and health demands become apparent. The speakers will offer insight into their agencies' safety and health priorities as we enter a new decade.

Moderator: Irv Etter, Senior Vice President, National Safety Council, Chicago, IL

10:15 AM **MSHA PRIORITIES - '90s**

William Tattersall, Assistant Secretary of Labor, MSHA, Arlington, VA

11:00 AM **OSHA PRIORITIES - '90s**

Gerard F. Scannell, Assistant Secretary of Labor, OSHA, Washington, DC

SESSION 9 **THE NEW NATIONAL TRANSPORTATION POLICY**

Program Developer: **HIGHWAY TRAFFIC SAFETY DIVISION**

Co-Sponsored By: **International Air Transport Section, Marine Section, Public Employee Section, Railroad Section**

U.S. DOT Secretary Skinner has initiated a new National Transportation Policy which will affect all modes of transportation--rail, air transport, marine, highways, for decades into the future. Safety and health issues are integrated into all aspects of this new policy. "MOVING AMERICA: NEW DIRECTIONS, NEW OPPORTUNITIES" addresses: maintenance and expansion of the nation's transportation system; fostering a sound financial base for transportation; keeping it competitive; ensuring that it supports public safety and national security; protecting the environment and the quality of life; and advancing U.S. transportation technology and expertise. NHTSA has a new initiative called NETS: Network of Employees for Traffic Safety which is a new cooperative employer program. Learn how your company can use the NETS concept for the reduction of motor vehicle crashes by your employees.

Moderator: Dr. Noel C. Bufe, Director, Traffic Institute, Northwestern University, Evanston, IL

10:15 AM **STRATEGIES FOR ACTION**

Galen J. Reser, Assistant Secretary for Governmental Affairs, U.S. Department of Transportation, Washington, DC

10:45 AM **NETS: NETWORK OF EMPLOYERS FOR TRAFFIC SAFETY-- SUPPORTING THE NATIONAL TRANSPORTATION POICY**

Adele Derby, Associate Administrator for Traffic Safety Programs, National Highway Traffic Safety Administration, Washington, DC

TUESDAY, OCTOBER 30 10:15-11:45 AM

SESSION 74 **ENVIRONMENTAL, SAFETY AND HEALTH PROGRAMS ARE GOOD BUSINESS: A MANAGEMENT PERSPECTIVE**

Program Developer: **CHEMICAL SECTION**

Co-Sponsored By: **Fertilizer and Agricultural Chemicals Section, Rubber and Plastics Section**

There are many companies with effective, ongoing, ES&H programs. These companies recognize that integrating such synergistic programs is very good business. Integration of these programs has lead to improved results, with the total being greater than the sum of the parts. Learn how to develop and integrate such programs into your organization. See what other companies have done and achieved!

Moderator: J.T. "Pete" Blackmon, Senior Engineer, International Technology Corporation, Nuclear Sciences Division, Knoxville, TN

John A. Auxier, Ph.D., CHP, Corporate Director, Nuclear Sciences, International Technology Inc., Knoxville, TN

Fred R. Mynatt, Ph.D., Vice President, Martin Marietta Energy Systems, Oak Ridge, TN

Donald McFee, Ph.D., CIH, Vice President, Occusafe Inc., Wheeling, IL

SESSION 75 WHAT TO CONSIDER BEFORE OFFERING CHILD CARE AS AN EMPLOYEE BENEFIT

Program Developer: EDUCATIONAL RESOURCES DIVISION

Co-Sponsored By: Community Service Division

A fast-paced, practical overview session for employers. Will open with a summary of research showing positive correlations between corporate sponsored child care and employee productivity. Next, an overview of environmental considerations especially in regard to loss control/risk management -- going beyond employee training to types of physical modifications that should be built into your center. Next, two speakers will discuss very important, specific risk management issues germane to child care centers -- the prevention of possible child abuse by the center's employees and children's motor vehicle transportation issues.

10:15 AM RESEARCH SHOWS THAT CORPORATE-SPONSORED DAY CARE IMPROVES PRODUCTIVITY

Sandra Burud, President, Burud & Associates, Inc., Child Care Benefits Consultants, Pasadena, CA

10:35 AM ENVIRONMENTAL CONSIDERATIONS IN YOUR CENTER'S RISK MANAGEMENT PROGRAM

Barbara Carlson, President, Safe Space Concepts, Inc., Houston, TX

10:55 AM DESIGN AND REMODELING CONSIDERATIONS IN REGARD TO SAFETY AND THE PREVENTION OF CHILD ABUSE

David L. Fender, Office of Systems Management, U.S. Army Safety Center, Ft. Rucker, AL

11:15 AM TRANSPORTATION SAFETY CONCERNS--CHILD SAFETY SEATS, DROP-OFF/PICK-UP AREAS & MORE

Rita S. Weiss, Program Analyst, Office of Occupant Protection, U.S. DOT/NHTSA-11, Washington, DC

SESSION 76 IMPLEMENTATION OF CDL

Program Developer: MOTOR TRANSPORTAION DIVISION

Co-Sponsored By: Commercial Vehicle Section, Fleet Administrator Section, School Transportation Section, Transit Section

Under federal standards issued by the Federal Highway Administration, drivers will have to obtain a Commercial Driver's License (CDL) in their state of domicile. The majority of states plan to begin conducting written and driving tests for CDL during 1990. Delegates will learn the latest information on challenges encountered from various state representatives involved in early implementation. The information presented will provide delegates a better perspective of how they can successfully implement their own CDL training programs.

Moderator: Stephen J. Zeigle, Fleet Safety Consultant, AIG Consultants, Inc., Chicago, IL

10:15 AM IMPLEMENTATION OF CDL - A FEDERAL OVERVIEW

Jill Hochman, Office of Motor Carrier Standards, Federal Highway Administration, Washington, DC

11:00 AM IMPLEMENTATION - RESULTS & WHAT YOU CAN EXPECT

Carole Waggoner, Chief, Program & Policy Administration, California Department of Motor Vehicles, Sacramento, CA

WEDNESDAY, OCTOBER 31 10:15-11:45 AM

SESSION 134 BASIC FLEET ADMINISTRATION SAFETY PROGRAM

Program Developer: COMMERCIAL VEHICLE SECTION

OSHA is placing a high priority on basic fleet safety in industry. Motor vehicle accidents are a leading cause of occupational fatalities and injuries. OSHA'S posture on fleet safety and the basic elements of a fleet administrator's safety program will be discussed.

Moderator: Joseph M. Koeberl, Manager, Commercial Vehicle Loss Control, Reliance National, New York, NY

Gerard F. Scannell, Assistant Secretary of Labor, OSHA, Washington, DC

William J. Grover, Creative Risk Services, Inc., Berlin, NJ

SPECIALTY PROGRAMS

AGRICULTURAL DIVISION

SESSION 15 INVESTIGATING AGRICULTURAL ACCIDENTS

MONDAY, OCTOBER 29 1:15-2:45 PM

Co-Sponsored By: National Institute for Farm Safety

Last year, agricultural accidents claimed the lives of some 1,300 individuals and resulted in approximately 120,000 disabling injuries. Many of these accidents involved factors that are unique to the agricultural workplace. Adequate investigations of these incidents are important because they provide information on causes and contribute to developing effective prevention strategies. The session will offer a clear statement on why accident investigations are needed and a summary of proven accident investigation techniques used by experienced professionals.

Moderator: Dr. William E. Field, Extension Safety Specialist, Purdue University, Department of Agricultural Engineering, West Lafayette, IN

1:15 PM INTRODUCTION AND OVERVIEW

Dr. William E. Field, Extension Safety Specialist, Purdue University, Department of Agricultural Engineering, West Lafayette, IN

1:30 PM THE IMPORTANCE OF AGRICULTURAL ACCIDENT INVESTIGATIONS - AN INSURANCE COMPANY PERSPECTIVE

Dan Hair, C.S.P., Vice President, Safety and Health, Zenith Insurance Co., Woodland Hills, CA

1:50 PM INVESTIGATING AGRICULTURAL MACHINERY ACCIDENTS - AN ENGINEERING PERSPECTIVE

Karl Anderson, Retired Safety Engineer (Deere & Co.), Tucson, AZ

2:10 PM INVESTIGATING AGRICULTURAL MACHINERY ACCIDENTS - AN EXPERT WITNESS PERSPECTIVE

William Borghoff, Senior Consultant, Packer Engineering Associates, Inc., Naperville, IL

2:30 PM QUESTIONS AND DISCUSSION

CEMENT, QUARRY AND MINERAL AGGREGATES SECTION

SESSION 16 FUTURE TRENDS IN FEDERAL HIGHWAY ADMINISTRATION (FHWA) SAFETY REGULATIONS

MONDAY, OCTOBER 29 1:15-2:45 PM

This session will inform attendees of the recent regulatory activities and future trends of the Federal Highway Administration and how those regulations will affect industries involving transportation, particularly in the area of truck safety. This is an extremely important session for industries regulated by the Department of Transportation.

Moderator: Cheryl Ann Suzio, Safety Coordinator, York Hill Trap Rock, Meriden, CT

Michael F. Trentacoste, Acting Director, Office of Motor Carrier Standards, Federal Highway Administration, Washington, DC

COMMERCIAL VEHICLE SECTION

SESSION 12 MEDIA RELATIONS IN CRISIS SITUATIONS

MONDAY, OCTOBER 29 1:15-4:30 PM

A valuable presentation for your company on developing a program and policy for dissemination of accident-related information to the media, and the legal ramifications of such dissemination.

Moderator: William M. England, Safety & Security Manager, McLane Company, Inc., Temple, TX

1:15 PM DOT PERSPECTIVE ON MEDIA RELATIONS

Stanley Hamilton, Office of Program Management, Office of Motor Carrier Safety, Washington, DC

2:00 PM DEVELOPING A PROGRAM & POLICY FOR DISSEMINATION OF ACCIDENT INFORMATION TO THE MEDIA

Kenneth A. Thompson, Vice President Safety, Yellow Freight Systems, Inc., Overland Park, KS

2:45 PM **HOW TO ESTABLISH PRO-ACTIVE RELATIONS WITH THE MEDIA**

Steve Hardymon, Vice President, Media Relations & Environmental Affairs, Chemlawn Services, Inc., Columbus, OH

3:30 PM **LEGAL ASPECTS OF NEWS RELEASES**

D. James Mackall, Attorney, Calhoun, Gump, Spillman & Stacey, Attorney & Counselors, Dallas, TX

SESSION 81 DRUG TESTING - REGULATIONS & TRAINING

TUESDAY, OCTOBER 30 **1:15-4:30 PM**

A review of the latest government information on drug testing requirements. In addition, attendees will receive education on drug abuse policy development and training. Special Note: A Certificate of Completion will be provided to each attendee following the presentation.

Moderator: Paul F. Tamburelli, Director of Safety, XTRA Corporation, Chicago, IL

1:15 PM **DRUG SCREENING REGULATIONS UPDATE**

Thomas P. Kosiowski, P.E., Chief, Standards Development Division, Office of Motor Carriers, Washington, DC

2:45 PM **DRUG ABUSE - POLICY DEVELOPMENT & TRAINING**

Bruce Wilkinson, Workplace Consultants, Inc., Gretna, LA

COMMUNITY SERVICE DIVISION

SESSION 1 EIGHTEENTH ANNUAL CONGRESS NATIONAL CITATION AWARDS BANQUET

SATURDAY, OCTOBER 27 **6:30-9:30 PM**

The Community Service Division of the National Safety Council, through the Citation Awards Program, publicly recognizes significant safety activities of individuals and community organizations. Awards will be presented to winners at this banquet.

Moderator: Phoebe Solomon, Chairman, Community Service Division, National Safety Council, American Foundation for Vision Awareness, Glencoe, IL

Welcome

T. C. Gilchrist, President, National Safety Council, Chicago, IL. Followed by dinner service.

7:45 PM **A COMMUNITY CONCERN: OUR ENVIRONMENT - THINK GLOBALLY, ACT LOCALLY...YOU CAN MAKE A DIFFERENCE!**

Robert N. Snelling, Director of Environmental Monitoring Systems Laboratory, U.S. Environmental Protection Agency, Las Vegas, NV

8:15 PM **AWARDS PRESENTATION**

Joanne E. Blair, Awards Chairman, Community Service Division, National Safety Council, Division of Traffic Safety, Illinois Department of Transportation, Springfield, IL

SESSION 4 A COMMUNITY CONCERN: MOTORCYCLE HELMETS - USE YOUR HEAD TO SAVE YOUR LIFE

SUNDAY, OCTOBER 28 **3:00-4:30 PM**

Co-Sponsored By: Educational Resources Division, Highway Traffic Safety Division

Legislation and education are the two main thrusts of the effort to save lives and prevent injury through the use of motorcycle helmets. This panel will discuss the personal and societal consequences of motorcycle head injuries and efforts to legislate mandatory helmet use on a nationwide basis.

Moderator: Carol Ladue, Vice Chairman, Community Service Division, National Safety Council, Assistant Director, Environmental Health and Safety, Virginia Commonwealth University, Richmond, VA

Marilyn Price-Spivak, President, National Head Injury Foundation, South Borough, MA

Honorable John H. Chafee, (R., Rhode Island), United States Senate, Washington, DC

Dr. Elizabeth Orsay, Specialist, Emergency Medicine, Lutheran General Hospital, Park Ridge, IL

Dr. Mervin Langley, Clinical Director, New Medic Rehabilatation Center of Wisconsin, Waterford, WI

DRIVER IMPROVEMENT PROGRAMS

SESSION 21 DDC...IT'S MORE THAN YOU THINK

MONDAY, OCTOBER 29 **3:00-4:30 PM**

This session will present an in-depth review of the different programs that continue to make DDC "The First Name in Defensive Driving." An overview and synopsis of each course will be presented along with a review of the appropriate audiovisuals. A panel of DDC users will discuss the effectiveness of the program as well as their particular success stories. Also the new FLI Municipal Services program will be introduced. This program deals with the driving needs of law enforcement, emergency medical and highway maintenance vehicles.

Moderator: Paulette Moulos, Manager, Marketing and Administration, National Safety Council, Chicago, IL

SESSION 54 DDC PREPARES YOU FOR CDL

TUESDAY, OCTOBER 30 **1:15-2:45 PM**

In 1986, Congress passed the Commercial Motor Vehicle Safety Act which requires minimum federal standards for persons who operate commercial motor vehicles. These standards require written and driving tests to determine whether drivers have the necessary skills and knowledge for safe vehicle operation. In less than a year, the National Safety Council has assembled a full spectrum of CDL training courses. Working in conjunction with FLI Learning Systems, Inc., and Buckley Productions, the National Safety Council is now making the following courses available: CDL Prep Course; CDL Written Test Refresher; CDL Skills Training Program; CDL Tests For Waste Services Drivers; CDL Tests For Transit Bus Drivers; CDL Tests For School Bus Drivers;

Moderator: M/Sgt. Charles J. Schwarting, Illinois State Police, Springfield, IL

James A. Solomon, Administrator of Training, National Safety Council, Chicago, IL

SESSION 88 DDC-ADD...A RESPONSE TO AN ATTITUDINAL PROBLEM

MONDAY, OCTOBER 29 **1:15-2:45 PM**

The Driver Improvement Programs Department is proud to introduce a program for the 1990s, the Defensive Driving Course - Attitudinal Dynamics of Driving (DDC- ADD). DDC-ADD takes a unique approach in applying the principles of Reality Therapy to driving and driver behavior. The course goes beyond basic skills instruction by addressing the attitudes and behaviors of the problem driver. Through interactive exercises, stimulating lectures, state-of-the-art visuals, and thought-provoking discussion, the problem driver will come to understand his or her responsibilities on the road.

Moderator: Jack Smith, Manager, Training Section, Canada Safety Council, Ottawa, Ontario, Canada

Julie Hinton, Managing Director, Safety Council of the Ozarks, Springfield, MO

EDUCATIONAL RESOURCES DIVISION

SESSION 3 HOW TO DEVELOP A COMMUNITY OUTREACH PROGRAM TO TEACH CHILDREN'S SAFETY

SUNDAY, OCTOBER 29 **1:15-2:45 PM**

"Starting Out Safe" is an adult/parent education program that will be presented during this session. It incoporates both A/V and printed materials and addresses motor vehicle accidents, choking, falls, burns and drowning. Beyond Starting Out Safe program content, you will have the opportunity to learn first-hand from a team of health care professionals who have done it all. Their presentation will include information on program development, implementation, evaluation, professionalization and funding. If you are going to do, or are doing, outreach/community education programming, this session is for you.

Moderator: Leanna Depue, Assistant Professor, Department of Health Education, Southern Illinois University, Carbondale, IL

Dona Lane, R.N., Program Coordinator, Pediatric Intensive Care Unit, Methodist Hospital of Indiana, Inc., Indianapolis, IN

Kathy Mathena, R.N., BSN, Nursing Unit Manager, Pediatric Intensive Care Unit, Marguerite Lilly Noyes Children's Pavilion, Methodist Hospital of Indiana, Inc., Indianapolis, IN

SESSION 22 HOW WOULD I KNOW? -- IS MY DRIVER EDUCATION PROGRAM WORKING

MONDAY, OCTOBER 29 **1:15-2:45 PM**

With OSHA considering requirements for driver education programming for all employees who drive motor vehicles as part of their jobs, the need to know how to evaluate the success of driver education programming is

increasing. Panelists will identify questions to be asked when determining if a fleet driver education program is working. Both qualitative and quantitative approaches will be discussed. Consideration will be given to pre-and post-employment factors which contribute to the success of driver education programs.

Moderator: John Palmer, Ph.D., Department Chair, Health Education & Traffic Safety Department, St. Cloud State University, St., Cloud, MN

Dr. Francis Kenel, Traffic Safety Consultant, American Automobile Association-Potomac, Falls Church, VA

Dr. James Aaron, Driver Performance Consultant, Palm Harbor, FL

Quinton Boroi, Fleet Safety Specialist, Commercial Insurance Group, Erie Insurance Group, Erie, PA

HIGHWAY TRAFFIC SAFETY DIVISION

SESSION 28 PEDESTRIANS AND OLDER DRIVERS

MONDAY, OCTOBER 29 1:15-2:45 PM

This session was developed because of the special safety issues represented by pedestrians and older drivers. Although the mileage death rate for 1989 fell to an all-time low of 2.2 deaths per 100 million vehicle miles of travel, pedestrian fatalities and injuries have remained relatively constant. Each year more than 8,500 pedestrians and another 70,000 are injured as a result of traffic accidents. Another population group of special concern is the older driver. Data indicate that, by the year 2000, the number of drivers above the age of 55 will double. Thus, there is a definite need for improving the transportation system, including driver education, vehicle and highway design. This session will focus on engineering, education and enforcement as means of addressing these special safety issues.

Moderator: Barbara Bailey, President, Ohio Women in Traffic Safety, Canton, OH

1:15 PM COUNTERMEASURES FOR PEDESTRIAN ACCIDENTS

Charles V. Zegeer, Program Manager, Roadway Studies, Highway Safety Research Center, Chapel Hill, NC

1:35 PM PEDESTRIAN EDUCATION - CONCEPTS, TECHNIQUES

David Preusser, Dunlap and Associates East, Inc., Norwalk, CT

1:55 PM OLDER DRIVERS - WHAT ARE THE ISSUES?

Carlton C. Robinson, Executive Vice President, Highway Users Federation, Washington, DC

2:15 PM SOME INTERESTING STATISTICS CONCERNING OLDER DRIVERS

John Eberhard, Research Psychologist, National Highway Traffic Safety Administration, Washington, DC

SESSION 29 WORK ZONE SAFETY

MONDAY, OCTOBER 29 1:15-2:45 PM

Over the past decade there has been a major effort by governmental agencies and the traffic control industry to improve the safety of motorists, pedestrians and workers in work zones. Part VI of the Manual on Uniform Traffic Control Devices is undergoing extensive revision to include the latest advancements in work zone technology. Further, the new Part VI provides additional information for urban areas including utility and emergency operations.

Moderator: Jarvis D. Michie, President, Dynatech Engineering Inc., San Antonio, TX

1:15 PM THE NEW PART VI OF THE MUTCD

Phill Russell, Chief, Traffic Control Branch, Office of Traffic Operations, Federal Highway Administration, Washington, DC

1:35 PM CURRENT RESEARCH IN WORK ZONE TRAFFIC CONTROL

Howard H. Bissell, Office of Research and Development, Federal Highway Administration, Washington, DC

1:55 PM INNOVATIVE WAYS TO PROTECT WORKERS IN WORK ZONES

James Migletz, Vice President, Graham-Migletz Enterprises, Inc., Independence, MO

2:15 PM WORK ZONE TRAINING AND CERTIFICATION

Victor Liebe, Director of Education, American Traffic Safety Services Association, Inc., Fredericksburg, VA

SESSION 94 TORT LIABILITY AND RISK MANAGEMENT

TUESDAY, OCTOBER 30 1:15-2:45 PM

SESSION 95 OSHA: PROPOSED REQUIREMENTS FOR OCCUPANT RESTRAINT USAGE AND DRIVER TRAINING

TUESDAY, OCTOBER 30 1:15-2:45 PM

OSHA has proposed a rule calling for employers to develop and implement a program of safety belt usage by employees. Programs are currently available for adoption by industry. Learn how your company can utilize the NETS concept for the reduction of motor vehicle crashes by your employees.

Moderator: Tom Reel, Executive Director, Traffic Safety Association of Michigan, Lansing, MI

Michael Moore, Fire Protection Engineer, U.S. Department of Labor, OSHA, Washington DC

SESSION 118 DRUGS IN THE WORKPLACE: OCCUPATIONAL HAZARD?--- LESSONS FROM TRANSPORTATION SAFETY

TUESDAY, OCTOBER 30 3:00-4:30 PM

Co-Sponsored By: Committee on Alcohol and Other Drugs

The use of controlled substances and alcohol in the workplace is a topic of much interest in these times. The Transportation industry, in both the U.S. and Canada, has had valuable experience in on-the-job testing for drugs and alcohol and will share these experiences with other industries in this session. Another question to be addressed is that of drug use vs. drug impairment. Degrees of impairment from the use of various controlled substances have not been readily defined in the past.

Moderator: J. Robert Zettl, Chief, Alcohol Test Program, Colorado Department of Health, Denver, CO

3:00 PM POLICY ISSUES AND RECOMMENDATIONS FROM THE NATIONAL TRANSPORTATION SAFETY BOARD

James B. Kolstad, Chairman, National Transportation Safety Board, Washington, DC

3:20 PM DRUGS AND TRANSPORTATION IN CANADA

Herbert M. Simpson, Ph.D., Executive Director, Traffic Injury Research Foundation, Ottawa, Ontario, Canada

3:40 PM DRUG USE VS. DRUG IMPAIRMENT

Alan C. Donelson, Ph.D., Managing Scientist, Failure Analysis Associates Inc., Palo Alto, CA

4:00 PM QUESTIONS AND ANSWERS

SESSION 119 INNOVATIONS IN TRAFFIC RECORDS TECHNOLOGY

TUESDAY, OCTOBER 30 3:00-4:30 PM

Co-Sponsord By: Traffic Records Committee

Acknowledging that we contain but do not eradicate highway safety problems, and that a dynamic society continually creates new challenges to safety, it becomes obvious that traffic records systems must evolve in response to new demands. As an essential support service for all other safety programs, traffic records should be recognized, nurtured and given its proper share of resources. Although traffic records systems periodically require a major overhaul at some expense, many worthy system improvements could be accomplished with small to moderate funding levels. This session will focus on a few specific programs that are viewed as state-of-the-art solutions to current complex problems.

Moderator: Clayton E. Hatch, Director, National Driver Register, National Highway Traffic Safety Administration, Washington, DC

3:00 PM AUTOMATED CITATION SYSTEM

Don Hinton, Chief, Planning and Analysis Division, California Highway Patrol, Sacramento, CA

3:20 PM CRITICAL DATA NEEDS

Mark Edwards, Ph.D., Chief, Mathematical Analysis Division, National Highway Traffic Safety Administration, Washington, DC

3:40 PM CLIPBOARD COMPUTER FOR DATA COLLECTION AND TRANSMISSION

C. Thomas Savell, Ph.D., President, Dynamic Analysis & Testing Associates, Carlsbad, CA

BIOMETRIC IDENTIFICATION SYSTEMS FOR DRIVER LICENSING

John C. MacGowan, Chief, Motor Carrier Information Division, Office of Motor Carrier Information Management, Federal Highway Administration, Washington, DC

PUBLIC SAFETY DIVISION

SESSION 41 WATER RESCUE FOR PUBLIC SAFETY PERSONNEL

MONDAY, OCTOBER 29 **1:15-2:45 PM**

Co-Sponsored By: Public Employee Section

Water rescues and the retrieval of trapped or stranded victims are among the most difficult operations faced by emergency personnel throughout the country. All too often, such attempts end not only in failure, but also result in the death or injury of rescue personnel. This program will examine how well-planned, well-coordinated rescues can be developed.

Moderator: Judith Grzegorski, Safety and Security Manager, Milwaukee Metro Sewage District, Milwaukee, WI

Virgil H. Chambers, Chief, Boating Safety Education, Pennsylvania Fish Commission, Bureau of Boating, Harrisburg, PA

Emily King, Special Program Administrator, Ohio Department of Natural Resources, Division of Watercraft, Columbus, OH

SESSION 157 BICYCLES - HELMETS AND VISIBILITY SAFETY

WEDNESDAY, OCTOBER 31 **1:15-2:45 PM**

Co-Sponsored By: Youth Activities Division

High tech has invaded the bicycle as thousands of adults are rediscovering the bike as a fun and fit way to spend leisure time with their families. The session will cover accident prevention, helmets, bicycling emergency skills, making riders more visible to motorists and tips for safe family fun.

Moderator: Mike Caven, Publications Consultant, Outdoor Empire Publishing, Seattle, WA

RAILROAD SECTION

SESSION 42A SALARY/WAGE CONTINUATION AND ITS ROLE IN F.E.L.A. CASES

MONDAY, OCTOBER 29 **1:15-2:45 PM**

Three railroads explain their programs and how wage continuation relates to attitude, reduced or increased los work days and contributions to the overall safety process.

Moderator: J.E. (Ed) Codd, Assistant Vice President, Risk Management, CSX Transportation, Jacksonville, FL

Debbie Marr, Manager of Wage Continuation, Union Pacific Railroad, Omaha, NE

Pat Wallace, Manager of Wage Continuation, Southern Pacific Railroad, San Francisco, CA

T. Steve Brown, Director of Safety Rules, Port Terminal Railroad Association, Houston, TX

SESSION 66A CROSSING SAFETY-THREE 'E'S: EDUCATION, ENGINEERING AND ENFORCEMENT

MONDAY, OCTOBER 29 **3:00-4:30 PM**

This session will present how three railroads handle crossing safety By committee/public education; law enforcement seminars; engineering changes, reduction of exposure, upgrading and closing crossing.

Moderator: Phil Juneau, Assistant Director of Accident Prevention, Canadian Pacific Railroad, Montreal, Quebec, Canada

Allen Hill, Manager of Safety Services, Union Pacific Railroad, Los Angeles, CA

Glen Hunsucker, Superintendent of Police Communication Center, Atchison, Topeka and Santa Fe Railroad, Topeka, KS

Ronald J. Morris, Assistant Superintendent of Safety, Kansas City Southern Railway Company, Shreveport, LA

SCHOOL TRANSPORTATION SECTION

SESSION 45 LIABILITY FOR FAILING TO ADEQUATELY TRAIN SCHOOL BUS DRIVERS

MONDAY, OCTOBER 29 **1:15-2:45 PM**

Covered in this session will be what is involved in doing a thorough training program, including the correct documentation for future reference.

Moderator: Bill G. Loshbough, Vice President, Human Resources, Durham Transportation, Rosemead, CA

Richard E. Fischer, Transportation Specialist, Trans-Consult, Mt. Pleasant, SC

Jack Burkert, Senior Vice President, Lancer Insurance Company, Long Beach, NY

SESSION 84 SPECIAL EDUCATION DRIVER TRAINING

TUESDAY, OCTOBER 30 **1:15-4:30 PM**

This session will cover caring for special exceptionalities, the growth of the medically fragile population and the liabilities of special education.

Moderator: Mary Helen Campbell, Curriculum & Training Specialist for Alternative Transportation, Albuquerque Public Schools, Albuquerque, NM

Richard F. Wenzel, Assistant Director, Division of Transportation Services, Milwaukee Public Schools, Milwaukee, WI

Steve J. Lovett, Director of Training Development, Wheels-2-Go, Incorporated, Rahway, NJ

SESSION 162 INNOVATIVE WAYS OF RIDERSHIP MANAGEMENT

WEDNESDAY, OCTOBER 31 **1:15-2:45 PM**

Covered in this session will be techniques taught to the drivers in ways of handling student discipline and incentives for behaving on a school bus, as well as disciplinary action necessary if students misbehave on a school bus.

Moderator: Lynn N. Degenhart, General Manager, Helweg & Farmer Transportation, Las Cruces, NM

Nancy Schulz, Division Safety Manager, Mayflower Contract Services, Kansas City, MO

TRANSIT SECTION

SESSION 48 MANDATORY DRUG TEST UPDATE

MONDAY, OCTOBER 29 **1:15-2:45 PM**

This is a two-part program covering operator drug testing. The first presentation will contain information from the Urban Mass Transit Administration. The second portion of the program will present information from the field.

Moderator: Jerry Burke, Safety Specialist, Transportation Division, Clarendon National Insurance Company, Bloomsburg, PA

James Chappas, Director of Safety, Training & Recruitment, Liberty Lines, Yonkers, NY

Thomas J. Rabe, Director of Safety, Greater Cleveland Regional Transit Authority, Cleveland, OH

Andrew D. Turner, Manager of Safety & Training, Pinellas Suncoast Transit Authority, Clearwater, FL

Roland Widman, Manager of Safety, Regional Transit Service, Inc., Rochester, NY

SESSION 70 MASS TRANSIT'S ROLE IN DISASTER PLANNING

MONDAY, OCTOBER 29 **3:00-4:30 PM**

Recent natural disasters have made it very apparent that every transit property needs to prepare and plan for such events. This program will explain how an effective plan can be prepared, and how transit operators can learn from the experiences of those who have dealt with disasters.

Moderator: Thomas D. Boyle, Manager, System Safety, Chicago Transit Authority, Chicago, IL

Richard S. Breeden, Safety & Training Instructor, OMNITRANS, San Bernardino, CA

Albert W. Hartkorn, Supervisor, System Safety, Metro Dade Transit Agency, Miami, FL

Doug Hartmann, BC Transit, Vancouver, British Columbia, Canada

SESSION 110 VANDALISM/OPERATOR SAFETY & SECURITY

TUESDAY, OCTOBER 30 **1:15-2:45 PM**

This session will review methods and procedures used by various transit properties to reduce vandalism on transit coaches and bus shelters. Types of security methods offered bus operators and the general public will be discussed.

Moderator: C.E. Switzer, Senior Supervisor of Safety - Security, Protective Services Division, Transportation Department, The City of Calgary, Calgary, Alberta, Canada

John J. Honan, Superintendent of Safety, Toronto Transit Commission, Toronto, Ontario, Canada

Wayne Huston, Supervisor of Transit Training, Metro Transit, Seattle, WA

Wayne McKinnon, Occupational Health and Safety Officer, Ottawa-Carleton Regional Transit Commission, Ottawa, Ontario, Canada

Carol L. Perkins, Industrial Safety Administrator, Central Ohio Transit Authority, Columbus, OH

SESSION 132 INDUSTRIAL HYGIENE CONCERNS IN BUS AND RAIL SHOPS

TUESDAY, OCTOBER 30 **3:00-4:30 PM**

The role of the industrial hygienist in the ever-changing area of transit safety will be discussed. Examples of problems and their solutions will be explained by several transit properties who are familiar with bus and rail maintenance facilities.

Moderator: Charles F. McCoubrey, Industrial Safety Officer, Mass Transit Administration, Baltimore, MD

James M. Dougherty, Industrial Safety Specialist, Greater Cleveland Regional Transit Authority, Cleveland, OH

James Gigantino, Manager, Safety Activities, New Jersey Transit Bus Operations Inc., Maplewood, NJ

Santo S. Radice, Brooklyn, NY

Steve J. Tima, Jr, Assistant Manager, Safety & Accident Prevention, Port Authority of Allegheny County, Pittsburgh, PA

SESSION 163 STRUCTURE/ROLE OF A SAFETY COMMITTEE

WEDNESDAY, OCTOBER 31 **1:15-2:45 PM**

Comparisons by several transit properties on the structure and various personnel involved with their safety committees. The interaction of members, as well as the overall effectiveness of the safety committee, will be discussed by each representative.

Moderator: Joseph F. Boscia, Director of Human Resources Development, New Jersey Transit Bus Operations Inc., Maplewood, NJ

Robert T. Cox, Director of Safety, Phoenix Transit System, Phoenix, AZ

Judy A. Martin, Industrial Safety Specialist, Risk Management Department, Cincinnati, OH

Gary E. Sutton, Safety Specialist, SEPTA, Philadelphia, PA

SESSION 173 COMPUTER APPLICATIONS IN TRANSIT SAFETY

WEDNESDAY, OCTOBER 31 **3:00-4:30 PM**

Various computer systems, programs and packages will be discussed as they specifically relate to the transit industry. Conclusions on efficiency and effectiveness will be discussed as well as comparisons of several transit properties.

Moderator: Frederick L. Mead, Director, System Safety Analysis/Performance, Chicago Transit Authority, Chicago, IL

James Gigantino, Manager, Safety Activities, New Jersey Transit Bus Operations, Inc., Maplewood, NJ

John J. Honan, Superintendent of Safety, Toronto Transit Commission, Toronto, Ontario, Canada

David Sproule, Safety and Training Manager, B.C. Rapid Transit Company Ltd., Burnaby, British Columbia, Canada

PROFESSIONAL DEVELOPMENT SEMINARS

THURSDAY, NOVEMBER 1 **9:00 AM-4:00 PM**

FRIDAY, NOVEMBER 2 **9:00 AM-4:00 PM**

SESSION 191 A & B HAZARDOUS MATERIALS TRANSPORTATION SEMINAR

International and federal law requires training for anyone involved in the manufacture, transportation or packaging of hazardous materials/dangerous goods. This seminar will help you comply with these regulations. Transporting hazardous materials/dangerous goods is regulated in detail not only by the United States, but also by foreign governments. In this country, the Department of Transportation administers the hazardous materials regulations through the Transportation Safety Act and supports the rules and guidelines set forth by the International Civil Aviation Organization (ICAO) Technical Intructions. In both cases, the regulations require that all persons handling, documenting or transporting hazardous materials/dangerous goods receive INITIAL and RECURRENT TRAINING.

This training is ideal for safety directors, security personnel and billing personnel in the chemical, petroleum, pharmaceutical, hospital, printing and paint industries, as well as for government personnel. The program covers: domestic and international regulatory agency review; enforcement procedures and penalties; purpose and use of hazardous materials tables; hazardous classifications and packaging requirements; shipper's certification; vehicular and container placarding; hazardous substances and wastes; and introduction to International Air Transport Association (IATA) and ICAO regulations with comparative analysis of Title 49: the dangerous goods list and its use; dangerous goods definitions and packaging requirements; and the U.S. Government (USG) variations and their impact. The instructor, Darlene W. Hunt, President of Hunt & Associates, Inc., and a nationally recognized expert in the domestic and international transportation of hazardous materials and dangerous goods, is known for turning a subject often viewed as being tedious and complex into an exciting and meaningful learning experience.

Darlene W. Hunt, President, Hunt & Associates, Inc., Cordoba, TN

VISION '90s

October 29-31, 1990
Las Vegas, Nevada

VISION '90s

National Safety Council Congress and Exposition
October 28-November 1, 1990
Las Vegas, Nevada

1990 REGISTRATION AND HOUSING FORM

Please photocopy forms and keep these instructions for your records.

REGISTRATION INFORMATION AND INSTRUCTIONS

Registration for the 1990 National Safety Council Congress & Exposition is simple. The following explains the Congress format. Once you have read this material, fill in the Registration section of the following form and return it along with the applicable fees to the National Safety Council Registration and Housing Office. Telephone registrations will not be accepted.

Types of Registration

Full Congress & Exposition entitles you to attend Congress sessions Sunday through Thursday, and the Exposition Monday through Wednesday.

One-Day Congress & Exposition entitles you to attend Congress sessions and the Exposition on either Monday, Tuesday or Wednesday. *You must indicate the applicable code for the day you plan to attend.*

Distributor. If you are a distributor of safety/health products or services, you can register as a distributor and attend the Exposition Monday through Wednesday. *Be sure to staple your business card to the registration form.*

One-Day Exposition entitles anyone to attend the Exposition on either Monday, Tuesday or Wednesday. *You must indicate the applicable code for the day you plan to attend.*

Student entitles any full time student to attend the Congress sessions Sunday through Thursday, and the Exposition Monday through Wednesday. *A copy of your student I.D. must be enclosed with your registration form.*

Spouses. If your spouse accompanies you and he/she is not a safety professional, a complimentary registration is available. Be sure to list his/her full name in the boxes at the top of the registration form.

Professional Development Seminars. Seventeen Professional Development Seminars (PDS) are offered this year. These seminars are held on Thursday or Friday and run from 9:00 a.m. until 4:00 p.m. **There is a separate charge for each seminar.** Upon completion, each participant will receive applicable CEU credits.

Early Registration Discount Fees

Attendees who register by September 28 are able to take advantage of the Early Registration Discount and save $10 to $80 on the regular fee. Following is a list of Early and Regular registration fees.

Registration		Early	Regular
Full Congress & Exposition	Member	$180	$230
	Nonmember	$240	$320
	Government	$180	$230
One-Day Congress & Exposition	Member	$110	$140
	Nonmember	$140	$170
Distributor		$ 50	$ 70
One-Day Exposition		$ 40	$ 50
Student		$ 40	$ 50
Professional Development Seminars	One-Day:		
	Member	$140	$190
	Nonmember	$190	$240
	Two-Day:		
	Member	$280	$360
	Nonmember	$360	$480

Fees Required with Registration

All registration fees must be received with the registration form. Do not FAX. Please make checks or money orders payable to National Safety Council/ITS.

Demographic Information

It is important that the demographic section of the registration form be completed by each participant. This information is gathered to help design a better Congress for all participants.

Attendance Policy

Young people under the age of 12 are not permitted to attend the Exposition, sessions, committee meetings or similar Congress activities. This restriction also applies to the setup and teardown days of the Exposition. Only one family member, spouse or child, may register free of charge for each fully-registered attendee. Therefore, any additional qualified family members must pay the applicable registration fee.

Individuals under the age of 12 are welcome to participate in the open social activities such as the tour program and Congress Night Out if accompanied by a parent or adult. Proof of age may be required. The National Safety Council reserves the right to deny admittance to any individual thought to be under the required age.

The Council imposes these restrictions in deference to speakers and attendees who seek to exchange the latest in safety and health information and products. The Congress and Exposition provides a business purpose and is not generally considered an area appropriate for children.

Video Taping and Audio Recording Policy

Video Taping

Due to the intricate and often sensitive technical material, and additionally, as a courtesy to the speakers and audience, video taping is expressly prohibited in any Congress education session, committee meeting or other function. This restriction also applies to the Exposition.

Audio Taping

Audio taping by personal hand-held recorders not tied into the sound system of the meeting room is only permitted when in compliance with the following restrictions:

The request must be submitted in writing to the Convention Department prior to the start of Congress. If approved by all parties concerned, written approval will be issued. Such approval must be brought to the session, meeting or exhibit hall and submitted to the Council staff representative present.

The recorded material is limited to personal use and may not be distributed to anyone else or further duplicated in any fashion.

Failure to comply with these policies automatically cancels the registration and right to participate. In such case, refunds will not be issued.

No Smoking Policy

Areas adjacent to the Exposition floor will be designated for smoking. Otherwise, it is Council policy that smoking is prohibited at all Congress activities (includes Exposition, Sessions, Committees).

Badge Returned by Mail

A confirmation will be sent to each participant. If you register by September 28, your Congress identification badge will be mailed to you at the address listed on the registration form. Registrations received after September 28, require that the attendee pick up his/her badge on-site at the Late Advance Registration Area.

Cancellation Policy

Cancellation requests must be sent in writing to the Registration and Housing Bureau of the National Safety Council. A $25.00 processing fee will be incurred on cancellations received by September 28. No refund will be issued on cancellations received after September 28. *Telephone cancellations will not be accepted.* Refunds will not be issued until after Congress regardless of when they were requested.

On-Site Registration

On-Site registration will be available as follows:

Las Vegas Convention Center

Saturday	October 27	8:00 am-4:30 pm
Sunday	October 28	8:00 am-4:30 pm
Monday	October 29	7:00 am-4:30 pm
Tuesday	October 30	7:00 am-4:30 pm
Wednesday	October 31	7:00 am-2:00 pm

See reverse side for Hotel Reservation Information

Hotel Reservations Information and Instructions

Making hotel reservations for the 1990 Congress is easy and will be efficiently processed if you read the following information carefully. Upon review, complete the hotel portion of the Registration and Housing form and return it to the Registration and Housing Office.

IMPORTANT INFORMATION. PLEASE READ CAREFULLY!

1 Congress registration is required to establish your hotel room reservation. All applications must be made on the following Registration and Housing form and mailed to National Safety Council Registration and Housing **(see address shown on the form.)** Do not send to the Council Headquarters Office. **No reservations will be accepted over the phone, or accepted directly by the hotels.**

2 Room confirmations will be issued by the Registration/Housing Office.

3 **All Las Vegas Hotels require an advance deposit to establish a room reservation.** The deposit must be in the form of a company or personal check, or a money order, made payable to National Safety Council/ITS. Credit cards or Government Purchase Orders will not be accepted for deposits. (Credit cards will be accepted at check-out for final payment.)

Deposit Amounts:
1 Room—single or double occupancy: $100.00
Suite—parlor + 1 bedroom: $300.00
Suite—parlor + 2 bedrooms: $400.00

4 All deposits are fully refundable if the room reservation is properly cancelled at least 48 hours in advance of the scheduled check-in date. Be sure to record when, how and with whom the cancellation occurred.

5 Las Vegas hotels have offered Limited Saturday check-ins for Congress. Rooms will be reserved on a first come, first served basis. Due to this circumstance, you should consider Friday or Sunday arrival; it may eliminate problems later.

6 Be sure to list names of everyone who will occupy the sleeping room.

7 If accommodations are not available at the hotels of your choice, comparable rooms will be reserved at other cooperating hotels. If the requested rate is not available, the next available rate will be assigned.

8 In order to secure a sleeping room, **reservations must be received prior to September 28.** After this date, requests will be handled on a space available basis.

9 All room rates include a fee to help cover the cost of the Congress Shuttle System.

Room Rates: Single (One person, one bed)	Room Rates: Double (Two persons, one bed)	Room Rates: Twin (Two persons, two beds)	Suite Rates: Suite, Parlor and One Bedroom	Suite Rates: Suite, Parlor and Two Bedrooms	Code for Mail Location	Hotel Name and Address	General Information: Very Limited Saturday Arrivals	General Information: No Smoking Rooms	General Information: Handicapped Rooms	General Information: Government Rate*	General Information: No Casino	General Information: Free Airport Shuttle	General Information: Health Club (May be Extra Charge)
54	54	54	160	225	01	Aladdin 3667 Las Vegas Blvd., South		•	•				
98	98	98	98	–	02	Alexis Park 375 East Harmon (all suite hotel)		•	•	•	•	•	•
85	85	85	209 650	288 1250	03	Bally's Grand 3645 Las Vegas Blvd.	•	•	•				•
86	86	86	–	–	04	Courtyard by Marriott 3275 Paradise Road		•	•		•		
95 135	95 135	95 135	250 500	375 650	05	Desert Inn 3145 Las Vegas Blvd., South	None	•	•				•
90 110	90 110	90 110	275 950	375 1250	06	Las Vegas Hilton 300 Paradise Road		•	•	•			•
84	84	84	325	450	07	Mirage 3400 Las Vegas Blvd.		•	•				•
75	75	75	225	325	08	Riviera 2901 Las Vegas Blvd., South			•	•			•
81	81	81	275 1500	300 1500	10	Sands 3555 Las Vegas Blvd., South		Only a few		•			•
84 94	84 94	84 94	94	–	11	St. Tropez 455 East Harmon Ave. $84, 1 room suite, king only $94, 2 room suite, king or twin			•		•		
75	75	75	200	275	12	Tropicana 3801 Las Vegas Blvd., South	•	•	•	•			•

All Congress hotels offer:

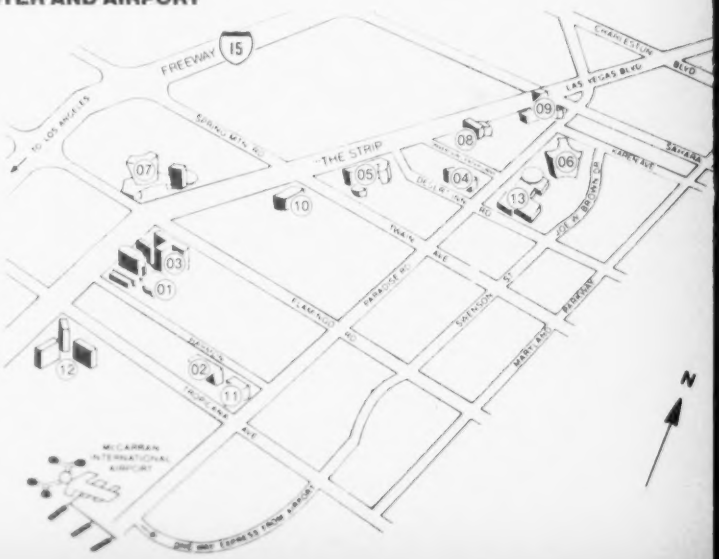
- Transportation service by Congress Shuttle to both the Las Vegas Convention Center and the neighboring Las Vegas Hilton Hotel
- Free parking
- Convenient airport transportation service at minimal costs
- Swimming pool

* Government Rate: Hotels indicated have a limited number of government rate rooms at $69.00 including tax. If rooms sell out, an alternate hotel will be assigned. Reservations require that an official government identification be presented at time of check-in.

CONGRESS HOTELS IN RELATION TO CONVENTION CENTER AND AIRPORT

ENTER PREFERRED HOTELS NAMES AND CODE LETTERS ON HOUSING FORM

01-Aladdin
02-Alexis Park
03-Bally's
04-Marriott Courtyard
05-Desert Inn
06-Las Vegas Hilton
07-Mirage
08-Riviera
09-Sahara
10-Sands
11-St. Tropez
12-Tropicana
13-Las Vegas Convention Center



VISION '90s

National Safety Council Congress and Exposition
October 28-November 1, 1990
Las Vegas, Nevada

1990 Registration and Housing Form

I. TYPE OR PRINT VERY CAREFULLY

Name _____ (First) _____ (Last)

Title _____

Organization _____

Address _____

City _____ State _____ Zip _____

Province _____ Country _____ Postal Code _____

Phone _____ FAX _____

Check One: ☐ National Safety Council Member, Customer Number _____ ☐ Non-member

Spouse Name _____ (First) _____ (Last)

Complimentary if attending and not a safety professional

II. ATTENDEE INFORMATION: MUST BE COMPLETED FOR PROPER REGISTRATION

PURCHASING POWER

During the year, I plan to make/influence the purchase of products on display at the Exposition of approximately

- ☐ 1 Less than $10,000
- ☐ 2 $10,000-24,999
- ☐ 3 $25,000-99,9999
- ☐ 4 More than $100,000

NUMBER OF EMPLOYEES

- ☐ R 0-249
- ☐ S 250-499
- ☐ T 500-999
- ☐ U 1,000-4,999
- ☐ V 5,000 or more

IS THIS YOUR FIRST CONGRESS?

- ☐ 72 Yes
- ☐ 73 No

STANDARD INDUSTRIAL CLASSIFICATION (Primary)

- ☐ 07 Agriculture
- ☐ 45 Air Transportation
- ☐ 79 Amusement & Recreation
- ☐ 23 Apparel
- ☐ 28 Chemicals
- ☐ 48 Communications
- ☐ 15 Construction
- ☐ 92.1 Courts
- ☐ 82 Education
- ☐ 49 Electric/Gas/Sanitary Services
- ☐ 36 Electronic Equipment
- ☐ 20 Food and Kindred Products
- ☐ 08 Forestry
- ☐ 99.4 Government
- ☐ 63 Insurance
- ☐ 86.3 Labor Unions
- ☐ 99.2 Law Enforcement
- ☐ 35 Machinery
- ☐ 39 Manufacturing
- ☐ 80 Medical/Health
- ☐ 86 Membership Organizations
- ☐ 33 Metals
- ☐ 10 Mining
- ☐ 26 Paper
- ☐ 29 Petroleum
- ☐ 27 Printing and Publishing
- ☐ 91 Public Administration
- ☐ 40 Railroads
- ☐ 30 Rubber and Plastics
- ☐ 41.5 School Buses
- ☐ 70 Services
- ☐ 99.1 State DOT
- ☐ 32 Stone/Clay/Glass
- ☐ 22 Textile Mill
- ☐ 52 Trade, Retail
- ☐ 50 Trade, Wholesale
- ☐ 99.3 Traffic Safety
- ☐ 41 Transit Properties
- ☐ 42 Trucking
- ☐ 44 Water Transportation
- ☐ 99 Other _____ (please specify)

MAJOR JOB FUNCTION (Check one)

- ☐ 18 Buyer/Purchasing Agent
- ☐ 19 Claims/Insurance/Risk Managers
- ☐ 43 Environmental Technical/Hazardous Waste/Industrial Hygienist
- ☐ 44 Fire Protection
- ☐ 45 Fleet Safety
- ☐ 52 Industrial/Labor Relations Manager
- ☐ 53 Law Enforcement Officer/Administrator
- ☐ 55 Loss Control Consultant
- ☐ 56 Maintenance/Operations/Production Manager
- ☐ 57 Medical Service/Occupational Health Director
- ☐ 60 Personnel Services
- ☐ 61 Product Safety
- ☐ 62 Recreation Manager
- ☐ 69 Safety and Health Administrator/Director/Engineer/Officers/Manager/Specialists/Supervisor/Coordinator
- ☐ 71 Safety Trainer/College Instructor/Vocational Educator/Curriculum Specialist
- ☐ 72 State FFA/4-H Leaders
- ☐ 73 Street/Highway Department Supervisors
- ☐ 74 Students

III. REGISTRATION CATEGORIES

Note Early-Bird Discounts

	Advance	After September 28
Full Congress and Exposition		
01 Member (90102)	$180	$230
02 Nonmember (90102)	$240	$320
18 Government Employee (90435)	$180	$230
One-Day Congress and Exposition		
Member (90108)		
03 Monday 05 Tuesday 07 Wednesday	$110	$140
Nonmember (90108)		
04 Monday 06 Tuesday 08 Wednesday	$140	$170
09 Distributor (90114)	$ 50	$ 70
One-Day Exposition Only (90122)		
10 Monday 11 Tuesday 12 Wednesday	$ 40	$ 50
14 Student—I.D. Required (90118)	$ 40	$ 50

FEE PAYMENT

	Code	Amount
III. Registration (See neighboring information)	_____	$_____
IV. Special Events (Transfer from reverse side)	_____	$_____
V. Professional Development Seminars (Transfer from reverse side)	_____	$_____
VI. Hotel Deposit (Government Purchase Orders not accepted)	_____	$_____
Grand Total	_____	$_____

RETURN FORM AND FULL PAYMENT OR GOVERNMENT PURCHASE ORDER TO:

Do not send via FAX.

National Safety Council Registration and Housing
c/o ITS 104 Wilmot Road, Suite 300
P.O. Box 825
Deerfield, IL 60015

G

Money orders or company/personal checks should be made payable to National Safety Council/ITS.

ADMISSION BY BADGE ONLY TO ALL CONGRESS SESSIONS & EXPOSITION

See reverse side for Hotel Reservation Information

IV. SPECIAL EVENTS

Check items for each registrant and transfer codes and fees to reverse side. Tickets will be issued for items indicated.

		Ticket Quantity
01	Inter-faith Prayer Breakfast (90198)	_____ x $10 each
02	Congress Night Out—To Be Announced	_____ x $_____each

V. PROFESSIONAL DEVELOPMENT SEMINARS

Note Early Bird Discounts

Check all seminars for each registrant and transfer codes and fees to reverse side. Tickets will be issued for admission and must be turned in to obtain continuing education credit. Sign up for 1 seminar per day.

	Advance	After September 28
One Day—Member	$140	$190
Nonmember	$190	$240
Two Day—Member	$280	$360
Nonmember	$360	$480

ONE-DAY SEMINARS Thursday, November 1, 9:00 a.m.-4:00 p.m.

		Amount
Community Topics		
01	Beyond Behavior Modification: What's New in Safety Motivation (90429)	_____
02	Liability Loss Control for the Public Employer (90431)	_____
Occupational Topics		
03	Practical Ergonomics in the Workplace (90148)	_____
04	Training Concepts for the Safety Trainer—Part I (90154)	_____
05	Selling Safety to Management (90166)	_____
06	You and Systems Safety (90145)	_____
07	Hazardous Waste Management (90401)	_____
08	Confined Space Awareness (90423)	_____
09	Compliance with the OSHA Lockout/Tagout Standard (90433)	_____
Friday, November 2, 9:00 a.m.-4:00 p.m.		
Occupational Topics		
10	The Back Injury: Prevention and Control (90158)	_____
11	Training Concepts for the Safety Trainer—Part II (90403)	_____
12	The Saf-T-Tree (90405)	_____
13	Accident Analysis (90152)	_____
14	Quality Listening (90425)	_____
15	Educating Management in the Principles of Accident Prevention (90427)	_____
TWO-DAY SEMINARS		
Thursday and Friday, November 1-2, 9:00 a.m.-4:00 p.m.		
16	Hazardous Material Transportation (90417)	_____
17	Applied Ergonomics (90421)	_____
	Per Person Total	$_____

VI. HOTEL RESERVATIONS

Use hotel codes and rates found on the Hotel Reservation Information and Instructions page, and complete all 4 choices:

Dates	Arrival Day and Date	Departure Day and Date	
1st Choice Hotel	2nd Choice	3rd Choice	4th Choice

Hotel Choice

Based On: ☐ Rate ☐ Location ☐ Hotel

Type of Accommodations: ☐ Single—1 person, 1 bed ☐ Double—2 persons, 1 bed ☐ Twin—2 persons, 2 beds ☐ Suite, Parlor + 1 bedroom ☐ Suite, Parlor + 2 bedrooms

Room Rate Requested $_____

Rooming with _____

Special Requests—Check all that apply:

☐ No Smoking Room if available
☐ Handicap Accessible Room
☐ Other _____

Room Deposit Required:

1 Room—Single/Double	$100
Suite—Parlor + 1 bedroom	$300
Suite—Parlor + 2 bedrooms	$400

Return this form and payment to:

National Safety Council Registration and Housing
c/o ITS 104 Wilmot Road, Suite 300
P.O. Box 825, Deerfield, IL 60015

Do not send via Fax. **Money orders or company/personal checks should be made payable to National Safety Council/ITS.**

This year, you may be required to pass the toughest test you've taken in years, to qualify for the commercial drivers license. If you've been hearing rumors about how CDL testing can take you off the road, take it easy. There's a simple way to get a balanced view of what's required, and that same video program will help you to master everything you need to know.

The National Safety Council's behind it, and learning is almost as easy as watching TV.

- The **CDL Pre-Trip** and **Skills Training Program** is a complete learning package that combines two 30-minute VHS videotapes:
  —"The Pre-Trip Inspection Video" and
  —"The Skills and Road Test Video."
- **The videos let you actually experience both important components of CDL testing through simulated tests.**
- And they cover **all** the material you need to know in order to pass.
- Guides are included with both tapes, and they make it easy to use the program in group study or by yourself.
- Both videos also include discussion of errors that result in automatic failure and point reduction.

The CDL License Skills Training Program is available for a limited time at just $99.95 for National Safety Council members, and $124.95 for non-members. Call today to order, or for information on other National Safety Council CDL programs.

CDL videos keep you on the road and in the money.

Stay on the road, and keep those paychecks coming.

Just a couple of hours stands between you and your CDL license. Get your training program now.

National Safety Council

444 N. Michigan Ave. ■ Chicago, Illinois 60611

1-800-621-7619

ext. 8502

1-312-527-4800 (in Illinois) ext. 8502

I did some really quality networking today. This is definitely the place to meet the right people.
You really do learn a lot at Congress, don't you? I mean about the important stuff you can use right away.
Did you see that exhibit featuring interactive video training? What a great idea!
In Las Vegas, the price is right! The airfare, hotel and food are a real bargain.

National Safety Council

Congress & Exposition
October 28–November 1, 1990
Las Vegas, Nevada

- Over 650 Exhibits of the Latest Technology and Services
- 180 Educational Sessions Concerning the Important Issues in Safety and Health
- 15,000 Participants from Occupational Safety and Health and Other Fields

Discount Registration Fee in Effect Until September 28, 1990

VISION '90s

Please send me details on the ***National Safety Council*** 1990 Congress & Exposition.

( ) Please check if you have attended a previous Congress.

( ) Please check for membership information.

Name

Organization

Address (No P.O. Box, Please)

City, State, Zip

MAIL TO: Convention Department, National Safety Council, 444 North Michigan Avenue, Chicago, IL 60611